# Lyme-Old Lyme High School Program of Studies 2021-2022 



Lyme-Old Lyme High School<br>69 Lyme Street<br>Old Lyme, CT 06371<br>860.434.1651

School Mission Statement:
Lyme-Old Lyme High School is a community of learners committed, with pride and purpose, to developing skilled problem solvers, effective communicators, and contributing citizens.

## TABLE OF CONTENTS

I. Principal's Message ..... 1
II. Program of Studies ..... 2-18
School Mission and Values ..... 2-3
Honor Code ..... 4
Accreditation ..... 5
Planning a High School Program ..... 6-10
Special Programs ..... 11-14
Eligibility for Athletics ..... 15
Student Services ..... 16
Recommended Grade Level Electives ..... 17-18
III. Curriculum Guide ..... 19-59
Art ..... 19-21
Computer and Business/Management ..... 22-25
English ..... 26-30
Mathematics ..... 31-34
Music ..... 35-38
Physical Education \& Health ..... 39
Science ..... 40-44
Social Studies ..... 45-47
Special Education ..... 48
Tech. \& Engineering ..... 49-52
World Languages ..... 53-59
IV. Four Year Planning ..... 60-62
V. Index of Courses ..... 63-67


Dear Students:

You are fortunate to be selecting coursework from a challenging and varied curriculum that is offered by a world-class faculty. Your education is a life-long process to which this school and the communities of Lyme and Old Lyme contribute significantly. We are a small high school with very high expectations for each of you; expectations that can be met with careful planning by students, families and staff.

In selecting your overall program and the specific courses that you will take, it is vitally important that you consult parents, teachers, school counselors and administrators. They can help you make decisions regarding your future plans and will assist you in creating the most rigorous path that is appropriate for you while maintaining a balance of school, family, and activities.

Most courses are designed to attract students with a wide variety of interests and abilities. In English, Math, Science and Social Studies, where courses are offered at different levels of academic rigor, you need not be in the same level for all your courses. If you are especially capable in Math or English, for example, the faculty may recommend Level 1 courses in that subject. However, if your skills and background in Science require more foundational skills, the faculty may recommend these courses at Level 2.

Once you have made your decisions, you should regard your course selection as your commitment for the coming year. Please spend the necessary time and effort to make this commitment a strong and successful one. Good luck, and may next year at Lyme-Old Lyme High School be an outstanding one for each of you.

All the best,
James P. Wygonik
Principal

## LYME-OLD LYME HIGH SCHOOL

## Mission Statement

"Lyme-Old Lyme High School is a community of learners committed, with pride and purpose, to developing skilled problem solvers, effective communicators, and contributing citizens."

## 21 ${ }^{\text {st }}$ CENTURY SKILLS LEARNING EXPECTATIONS and PERFORMANCE GRADUATION REQUIREMENTS

The teachers and administration of LOLHS have identified the following $\mathbf{2 1}^{\text {st }}$ Century Skills valued by our community:

- Collaboration - works and participates effectively as a member of a group or community
- Communication - expresses self through a variety of modalities
- Critical Thinking - uses logical reasoning and technology to synthesize complex information and solve problems
- Creativity and Innovation - demonstrates ideas through creative and innovative application of skills

These four skill areas will serve as our Performance Graduation Requirement (PGRs), and methods (rubrics) have been developed to assess student achievement in each of these areas. Performance Graduation Requirements represent the $21^{\text {st }}$ Century Skills and concepts that every graduate from Lyme-Old Lyme High School is expected to know and demonstrate.

Our mission is to help students develop these skills during their four years of high school. The faculty is committed to providing students with opportunities for development, and the scoring rubrics will be used as tools to communicate students' progress as they demonstrate growth on the four-point rubric scale. The goal for each student is to demonstrate proficiency of each skill area and earn a minimum of a THREE (3) on each PGR rubric by the end of their high school career.

The rubric score that a student earns for a Performance Graduation Requirement is independent from the student's grade in a specific course. The major component of any student's PGR score is the quality of that student's performance in meeting the specific expectation identified in the PGR and its performance standard. Ratings are designed to reflect performance standards that would apply beyond the given classroom and/or our school.

## Core Beliefs

The Lyme-Old Lyme High School learning community is committed to the BELIEF that students' learning potential is maximized when:

- a safe and embracing environment is created and maintained for all and by all.
- collaboration among members of the learning community consistently occurs.
- individual and collective successes are celebrated and promoted.
- caring relationships between students and faculty are nurtured and encouraged.
- $21^{\text {st }}$ century skills are developed and applied through authentic problem solving, effective communication, and creativity and innovation.
- inquiry and performance-based learning opportunities are regularly offered.
- learning objectives and essential questions are clearly articulated and linked to daily lessons.
- high standards and expectations are communicated and reinforced.
- instruction is differentiated to meet the learning styles and needs of all students.
- activities are engaging, interesting, and student-centered.
- formative assessments are used to measure understanding before new material is introduced.


## Core Values

As a collective learning community, we VALUE opportunities to strengthen and develop:

## Accountability

by taking ownership, demonstrating responsibility, and fulfilling the expectation of one's role and actions.

## Respect

by expressing worth or honor towards a person, property or circumstance that is guaranteed for all and by all.

## Integrity

by adhering to strict moral principles governed by honesty, pride and responsibility.

## Rigor

by establishing exceptional academic expectations for content mastery, applied skills, and critical thinking of the disciplines being taught.

## HONOR CODE

Lyme-Old Lyme High School is committed to the academic, social and ethical development of each member of our learning community. We believe in a culture focused on learning in order to succeed. We believe in taking ownership and pride in our actions and choices by demonstrating our Core Values of Accountability, Integrity, Respect, and Perseverance. In addition to abiding by the rules set forth in the student handbook, LOLHS Honor Code is founded on the following pillars of character:

## Honesty is demonstrated by:

- Refusing to lie, plagiarize, steal, or deceive in any way
- Using truthful words
- Being truthful in your actions


## Responsibility is demonstrated by:

- Modeling the core values and beliefs of the LOLHS at all times
- Advocating for self and others
- Not participating actively or passively in wrong doing
- Following through on academic and co-curricular commitments
- Taking action against wrongdoing
- Taking ownership of one's work, words and actions


## Trust is demonstrated by:

- Believing that others will act in an honest manner
- Relying on the integrity and character of others
- Fostering a collaborative relationship amongst students, faculty and staff, parents, and the broader community


## Roles and Responsibility of Students:

- Have knowledge and understanding of the Honor Code.
- Produce authentic work.
- Be a positive advocate for self and others.
- Take responsibility for your own learning.
- Promote and model behavior reflected in the Honor Code.


## Roles and Responsibility of Faculty:

- Have knowledge and understanding of the Honor Code.
- Communicate and reinforce clear standards and ethical practices.
- Clarify expectations for all assignments.
- Develop, model, and sustain the characteristics outlined in the Honor Code.
- Proactively communicate with students and parents.


## Roles and Responsibilities of Parents:

- Have a knowledge and understanding of the Honor Code.
- Model and support the standards of honesty, responsibility and trust.
- Support their child in advocating for themselves.
- Support faculty and administration in upholding the Honor Code.

Lyme-Old Lyme High School

## ACCREDITATION STATEMENT

Lyme-Old Lyme High School is accredited by the New England Association of Schools and Colleges, Inc. (NEASC), a nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

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

## EQUAL ACCESS STATEMENT

All students are afforded equal access in recruitment, enrollment and placement in all academic and vocational programs available at Lyme-Old Lyme High School, Ledyard Vocational/Agricultural High School, Marine Science Magnet High School of Southeastern Connecticut, Norwich Technical School, Grasso Technical School, New London Science and Technology Magnet School and Vinal Satellite Technical School.

## COMPLIANCE NOTICE

The Regional School District 18 Board of Education prohibits harassment and discrimination in educational programs, services, or employment on the basis of race, color, religion, ancestry, age, marital status, military or veteran status, national origin, sex, gender identity or expression, sexual orientation, or past or present physical or mental disability, and provides equal access to the Boy Scouts and other designated youth groups, in accordance with Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments Act of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act (ADA) of 1991, the ADA Amendments Act of 2008, and appropriate state laws.

## PLANNING A HIGH SCHOOL PROGRAM

Since there are multiple pathways to graduate from Lyme-Old Lyme High School including but not limited to dual enrollment in an accredited post-secondary institution, program planning is extremely important. It is best done when projected over the full four years of high school and when realistic program decisions are made. These decisions can be properly reached when student goals, abilities, interests and achievements are carefully considered. The result of good planning and a home/school partnership is a successful and satisfying high school career. If a student desires to graduate from Lyme-Old Lyme High School prior to their expected date of graduation, the student should work closely with their School Counselor to explore their options.

## MINIMUM GRADUATION REQUIREMENTS

Per State of Connecticut Public Act 42.12, commencing with the class of 2023, and for each graduating class thereafter, the following twenty-five (25) credits are necessary to graduate:

| Graduation Requirements Class of 2022 |  | Graduation Requirements Class of 2023, 2024, 2025 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| English | 4 Credits | Humanities: 9 Credits | HM | M |
| Math | 3 Credits | English | 4 Credits |  |
| Social Studies | 3 Credits: including . 5 Civics and 1.0 US History | Social Studies | 3 Credits: including . 5 Civics and 1.0 US History |  |
| Science | 3 Credits: | Fine Arts | 1.0 Credit |  |
| Vocational/Fine Arts | 1 Credit | Humanities Elective | 1.0 Credit |  |
| PE/Health | 2 Credits | Science, Technology, Engineering and <br> Mathematics: 9 Credits <br> stem |  |  |
| Additional Electives | 7 Credits | Mathematics | 3 Credits |  |
| Total | 23 Credits | Science | 3 Credits |  |
|  |  | Science, Technology, <br> Engineering, <br> Mathematics and Business Electives | 3 Credits |  |
|  |  | World Language | 1 Credit |  |
|  |  | Physical Education and Wellness | 1 Credit |  |
|  |  | Health \& Safety Education | 1 Credit |  |
|  |  | Mastery-based Diploma Assessment (Performance) | 1 Credit |  |
|  |  | Electives | 3 Credits |  |
|  |  | Total | 25 Credits |  |

The .5 lab credit associated with some L2 Algebra I, L2 Geometry and L2 Algebra II courses cannot be used towards the 3credit Math requirement, but can be used towards overall graduation credits and STEM elective credit. An Algebra I course taken at Lyme-Old Lyme Middle School will appear on the Lyme-Old Lyme High School transcript and will count towards the CT State Required (3) years of Math to graduate from LOLHS but it will NOT count towards the required 25 credit graduation requirement. Students are required to participate in 25 credits worth of classes at LOLHS.

In addition to the course requirements listed, the following additional requirements must also be met:

| Area <br> Assessed | Connecticut State Mastery Examination <br> Goal Level in: | Alternatives if state wide mastery examination goal level <br> is not met |
| :--- | :--- | :--- |
| Math | SAT: 530 on Math <br> On CT SAT School Day and subsequent <br> SAT administrations. | $70 \%$ in each of 3 years of math or equivalent on district <br> comprehensive math assessment |
| Reading |  <br> Writing <br> On CT SAT School Day and subsequent <br> SAT administrations. | $70 \%$ in each of 4 years of English or equivalent on district <br> comprehensive English assessment |
| Writing |  <br> Writing <br> On CT SAT School Day and subsequent <br> SAT administrations. | $70 \%$ in each of 4 years of English or equivalent on district <br> comprehensive English assessment |
| Science | Reach Proficiency on the NGSS Science <br> Assessment | $70 \%$ in each of 3 years of science or equivalent on district <br> comprehensive science assessment |

The Board of Education, through the Superintendent or his/her designee, shall identify a course of study for those students who have not successfully completed the assessment criteria to assist such students to reach a satisfactory level of competency prior to graduation.

## YEARLY COURSE LOAD REQUIREMENTS

Students must carry a minimum course load of 6.5 credits of scheduled classes unless otherwise determined by an IEP meeting or administrative approval. Courses that do not meet during the school day do not count towards the 6.5 minimum course load with the exception of Virtual High School courses. This exclusion also refers to any classes that meet before or after school.

## COURSE LEVELS

Academic courses in English, Math, Science, World Language and upper level Social Studies are classified by level of rigor. $9^{\text {th }}$ grade Social Studies courses are heterogeneously grouped and non-leveled. Elective courses both academic and career oriented have a variety of level designations as determined by the department. The majority of electives do not have alternative options beyond the designated level.

| AP | Advanced Placement |
| :---: | :---: |
| ECE | Early College Experience |
| NL | Not Leveled |
| L1 | Honors |
| L2 | College-Preparatory |

Course levels are determined by the school administration after recommendations from the Curriculum Review Committee and the Department Leaders. All school transcripts include an explanation of the course leveling system and our weighted grading policy to better inform colleges and universities about rigor of each student's program. All credits transferred from another school system will be included on the LOLHS transcript and will be weighted accordingly for honors, ECE and AP classes, as noted on the sending school transcript, utilizing the LOLHS weighting system.

## GRADE CLASSIFICATION MINIMUM REQUIREMENTS

For the Class of 2022 to be promoted to Grade 12, a student must have successfully completed a minimum of seventeen course credits, including ninth and tenth grade English classes. For the Class of 2023 and beyond, to be promoted to Grade 10 in Lyme-Old Lyme High School, a student must have successfully completed a minimum of 5.5 course credits. To be promoted to Grade 11, a student must have successfully completed a minimum of 11.5 course credits including ninth grade English. To
be promoted to Grade 12, a student must have successfully completed a minimum of 17.5 course credits, including ninth and tenth grade English classes.

## CREDIT SUGGESTIONS FOR THE COLLEGE BOUND

Nearly all Lyme-Old Lyme High School graduates far exceed the minimum credit requirements needed for graduation. Regardless of post-high school plans, students should strive to learn as much as they can in as many disciplines as possible. As a guideline, however, competitive colleges expect that college-bound students should graduate with at least the following credits: English - 4, Math -3-4, (including Algebra II and for some colleges, Pre-Calculus), Science - 3, Social Studies - 3 and World Language - 3 (of one language). See page 60 for examples of 4 -year plans.

Taking 4 years of each academic subject greatly improves a college applicant's credentials. In addition, exploring electives in the fine arts, technology and engineering, computer and business management sciences departments are highly recommended for the college-bound student. Electives that demonstrate an interest or document a talent help students fully develop their transcripts.

## SENIOR YEAR REQUIREMENTS

Seniors must carry at least 6.5 credits of scheduled classes throughout the year. They must also earn at least 4.5 credits in their senior year to be eligible for a diploma. Courses that do not meet during the school day do not count towards the 6.5 credits with the exception of Virtual High School courses. Diplomas will be withheld until all financial obligations are met.

## GRADUATION CEREMONY REQUIREMENTS

To participate in the graduation ceremony each senior must have earned the minimum number of credits (total credits, distributional credits, and senior year credits) required for graduation by the Board of Education.

A senior who is unable to earn the credits required for a diploma as a result of an unforeseen emergency or health problem in the last two marking periods may request an exception to this policy from the Superintendent of Schools.

## GRADE POINT AVERAGE

A weighted grade point average (GPA) is in effect at LOLHS. All final course grades will carry a weight of 1 except for the following: Advanced Placement (AP) and Early College Experience (ECE) courses $=1.1$; Level $1=1.05$.

## RANK IN CLASS

Lyme-Old Lyme High School DOES NOT REPORT RANK IN CLASS. Please see the school counselors if you have questions regarding Rank in Class.

## SCHEDULE CHANGES

Every student should regard the schedule he or she has received as a "contract." Since student course requests drive the development of the overall master schedule, students must make solid choices and be committed to their schedule. Therefore, your course request sheet should be considered your agreement to enroll in your chosen courses, and requests for schedule changes will only be granted after serious consideration is made as to the overall impact on the master schedule. Consequently, schedule changes will be permitted only under specific circumstances.

Some schedule changes may be necessary in the case of unanticipated failures, loss of credit, completion of summer school courses, addition of classes to meet the required 6.5 credits, technical errors or recommended academic level changes. Dropping

## Lyme-Old Lyme High School

of courses or lateral moves to accommodate personal schedule desires cannot be accommodated. If a schedule change is necessary, such a request must be (1) for substantive academic reasons; (2) due to conflicting responsibilities or (3) due to hardship situations. All such requests will require the completion of a schedule change form with signatures from teachers, parents, school counselors and administration. Requests will be reviewed by the appropriate school counselor on a case-bycase basis, with final approval given by the Principal. Schedule change requests will be denied if they are simply to meet the personal preference of the student, or if class size limits or other scheduling parameters make the change impossible or illadvised.

It must also be noted that students will not be able to change their classes, academic or elective, for teacher preference or to facilitate a late arrival/early dismissal. Students are committing to their course requests regardless of where the course falls within the daily schedule rotation.

No requested schedule change is final or guaranteed unless and until all necessary signatures are completed, AND the change has been approved and entered into the data system. The student must remain in the previously scheduled class until the course change form has been returned to the counselor, the principal has approved the change, the counselor has informed the teachers impacted by the change and the change is reflected in the student's schedule on PowerSchool. Students who stop attending class prematurely are subject to the attendance policy and disciplinary consequences. Students should continue to do their best possible work, as no change is guaranteed.

## ADD/DROP PERIOD FOR ELECTIVE SCHEDULE CHANGES

LOLHS students have the opportunity to explore a wide variety of curricular options. There may be some instances when a student chooses an elective course, in this spirit of exploration, which is not a good fit. Subsequent request for a schedule change will only be considered during the first eight days of the semester in which that course begins.

## WITHDRAWING FROM A COURSE

Requests to drop/withdraw from a course are discouraged. However, in extraordinary circumstances when a student may wish to withdraw from a course, and the schedule remains at or above the minimum requirements, the following rules apply:

- The student must discuss the possibility and advisability of the drop with his/her counselor and with the teacher of the class. Teacher recommendations will be considered. Parent/guardian approval is required. Final approval is given by the Principal.
- For a full year course, if a student withdraws from a class before the first report card, no record of that class will appear on a student's transcript. If a student withdraws from a class after the first report card, the transcript will list the course, with a record of WP (Withdrawal Passing) if a student withdraws with a passing average, or WF (Withdrawal Failing) if the student withdraws with a failing average.
- For a semester course, if a student withdraws from a class before the first progress report, no record of that class will appear on a student's transcript. If a student withdraws from a class after the first progress report, the transcript will list the course, with a record of WP (Withdrawal Passing) if a student withdraws with a passing average, or WF (Withdrawal Failing) if the student withdraws with a failing average.
- If a student is changing Levels in a course (L1 vs. L2), the student's grade will transfer to the new course to be incorporated into the course grades. The grade will move as an exact number and will not bring any weighting with it. No record of the prior course will show on the transcript.
No requested schedule change is final or guaranteed unless and until all necessary signatures are completed, AND the change has been approved and entered into the data system. The student must remain in the previously scheduled class until the course change form has been returned to the counselor, the principal has approved the change, the counselor has informed the teachers impacted by the change and the change is reflected in the student's PowerSchool. Students who stop attending class prematurely are subject to the attendance policy and disciplinary consequences. Students should continue to do their best possible work, as no change is guaranteed.


## REPEATING A COURSE

A student may retake a course that he/she has failed and/or for which credit has been lost. The course title will appear twice on the transcript along with the grades earned each time the course was taken. A student may not retake a course for credit if he/she received credit initially, but may retake it to improve his/her grade if the course is a prerequisite for another in the series. (*See exceptions in Art and Technology.)

## COURSE CANCELLATIONS

Lyme-Old Lyme High School reserves the right to delete entirely a course offering when enrollment, staffing, or fiscal conditions warrant. This normally occurs as a result of insufficient enrollment in a non-sequential, non-required course at a time when staff must be diverted to heavily enrolled and required courses.

## COURSE RECOMMENDATION OVERRIDE

A great deal of thought is put into the course level recommendation process. Teachers consider many factors when making a level recommendation, including current level of achievement, motivation, and potential for success. Should disagreement arise over the level recommendation, a parent/guardian may consider a course recommendation override.

Serious thought must be given in advance of making the decision to override. The decision can only be made after conversations among the student, parent/guardian, relevant teachers, and school counselor occur. The master schedule is driven by course requests and enrollment, and once completed, there is little room for movement. Therefore, a student who chooses to override into a course will be expected to remain in that course for the duration of the academic year.

For an override to be approved, two steps must be completed by the parent. First, the parent/guardian MUST consult with the current academic teacher who made the recommendation, to determine the advisability of an override. Second, an override form must be completed, signed and returned to the school counseling office. The deadline for incoming $9^{\text {th }}$ graders to submit Override Forms to Renee Molnar at LOLMS is Wednesday, March 10, 2021. The deadline for LOLHS students to submit Override Forms to the LOLHS School Counseling Office is Wednesday, March 31, 2021.

## COLLEGEBOARD ADVANCED PLACEMENT PROGRAM

The Advanced Placement (AP) program is a cooperative educational endeavor based on the fact that many young people can complete college-level studies in secondary school and represents a desire of schools and colleges to foster such experiences. Participating colleges, in turn, grant credit and/or appropriate placement to students who have done well on the AP Examinations held in May. The following courses are offered by Lyme-Old Lyme High School under the College Board's Advanced Placement (AP) Program:

Biology<br>Calculus (AB)<br>Chemistry<br>Chinese Language<br>Computer Science A<br>Drawing<br>English Literature and Composition<br>European History<br>French Language

Music Theory<br>Physics II<br>Psychology<br>Spanish Language<br>Statistics<br>United States History<br>2-D Art and Design<br>3-D Art and Design

SPECIAL NOTE: AP courses culminate with final exams in June like all other courses. In addition, AP students are required to take the official College Board AP exam in May in order to obtain AP course credit on their High School transcripts. Students who do not commit to taking the May AP exam will be asked to select one or more non-advanced placement course to replace their AP course in their schedules. As there is a cost associated with the AP Exam, it is important to note that there are processes in place for families who may be struggling financially; please see your School Counselor for more information.

Changes to AP processes occurred in the 2019-2020 school year. All students enrolled in AP courses will be asked to register online in the first weeks of school and then sign a Final Commitment Form in October. This will necessitate all students to feel comfortable in their AP Classes before the end of the $1^{\text {st }}$ quarter. Any changes to their AP classes after the $1^{\text {st }}$ quarter may result in change fees initiated by the College Board.

## INDEPENDENT STUDY PROGRAM

To better meet the individual needs of the students and community, it is possible for a student to take independent study courses with members of the faculty and/or administration. This program will give students the opportunity to explore, in depth, a curriculum appropriate to the area or topic, built around individual interests and abilities. It may be taken for credit or not. An Independent Study Request Form must be picked up from the School Counseling Department, completed, and approved by the student, parent, teacher, appropriate department head, school counselor, and Principal BEFORE any such program can be initiated for credit.

The Independent Study Request Form will require the student to work with their independent study faculty advisor to develop the course goals and objectives, as well as the course evaluation process. An independent study will not be approved if it is for a course similar to one we offer here at LOLHS. In addition, students may not use their participation in an outside program as the curriculum for the Independent Study. Independent Study arrangements are at the discretion and availability of the Faculty and may sometimes be limited.

## Guidelines for Independent Study Program:

1. Student and faculty advisor must agree on curriculum to be covered, how the independent course will be graded, and meeting times for the course, they include this information on an Independent Study Request Form, signed by student, parent/guardian, faculty advisor of the independent study and the appropriate department head.
2. The student must present this outline to his/her School Counselor, who will seek administrative approval, before he/she may be enrolled in the course.
3. The student will meet periodically with his/her faculty advisor during the marking period on a prearranged schedule or during a particular period of the school day.
4. At the end of each marking period, the faculty advisor will submit a grade on the course. Typically, grading for independent studies is done on a "pass/fail" basis unless numeric grading is requested and approved at the time of application.

## UCONN EARLY COLLEGE EXPERIENCE

UConn Early College Experience (ECE) provides academically motivated students with the opportunity to take university courses while in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree.
UConn ECE instructors are high school teachers certified as adjunct professors by the University. UConn ECE faculty fosters independent learning, creativity and critical thinking-all important for success in college. Lyme-Old Lyme High School offers UConn ECE courses in Art, Biology, Chinese, English, French, Latin, Music History, Music Theory, Physics and Spanish. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. UConn credits are transferable to numerous colleges and universities. Add/drop practices are based on University of Connecticut deadlines and policies. For additional program information visit: www.ece.uconn.edu.
As of the 2020-2021 school year, a 3 credit course will cost $\$ 150$ and a 4 credit course will cost $\$ 200$ plus students are charged a $\$ 50.00$ program fee. There are processes in place for families who may be struggling financially; please see your School Counselor for more information.

## VIRTUAL LEARNING

Virtual Learning, previously known as Virtual High School (VHS), is just one way for students to expand their academic experiences and earn credits toward graduation requirements. Students may elect to participate in a variety of rich and challenging courses which take place entirely over the internet. Over 150 semester courses are offered in Arts, Business, English, Language Arts, Foreign Language, Life Skills, Math, Science, Social Studies, Technology, and Pre-AP courses as well as AP full year courses. Virtual Learning provides quality online high school courses taught by highly qualified high school teachers from around the world. All Virtual Learning classes are teacher facilitated with activities that are studentcentered, whole class discussion and group activities. Virtual Learning is intended to supplement and expand our present offerings. LOLHS students may not take a course via Virtual Learning if it is offered through the in-school curriculum. Virtual Learning courses are best suited for independent learners and students who are comfortable learning and communicating in an online learning management system.

As a member of the Virtual Learning Collaborative, LOLHS agrees to certain regulations established by Virtual Learning. Therefore, when considering a Virtual Learning course, it is important to consider the following:

- Communication with Virtual Learning is strictly through the Site Coordinator who acts as a liaison between Virtual Learning and LOLHS.
- The Virtual Learning calendar differs slightly from LOLHS academic calendar. Semester courses are 15 weeks and year-long courses are 35 weeks. Quarter, semester and end of year timelines vary based on the Virtual Learning calendar published annually.
- Virtual Learning grades are visible only to the student and site coordinator. The site coordinator posts only mid-quarter progress report grades and final quarter grades in PowerSchool. Itemized grades in the gradebook are not visible for parents.
- Once a student is enrolled in the course, they will have a 1-week trial period. Once that period is over, and provided that there are no extenuating circumstances, a student will not be able to drop the course. This differs from the add/drop timeline for regular LOLHS courses.
- Virtual Learning has a $\$ 75.00$ fee for AP courses and/or Laboratory course. These fees are paid by Regional District 18.

If you would like to learn more about Virtual Learning and view the course catalogue, please visit the website by going to https://vhslearning.org/. Prerequisite: Because there are only 20 virtual seats available to LOLHS per year, interested students must complete the application process. Applications are found on the Region 18 website, in the School Counseling Office and must be submitted to Mrs. Trost. For further information and deadline dates, please contact Mrs. Lucy Trost at trostl@region18.org.

## CAREER SERVICES

For students to remain competitive in this fast-changing world, career readiness is vital. At Lyme-Old Lyme High school many opportunities are available to students to explore and experience their potential career path. The State of Connecticut has adopted the Common Core State Standards to implement career readiness initiatives. It is under that direction that we have so many options for students available. Students begin career exploration in middle school and continue the process as freshmen in High School 101. In this class, and throughout their 4 years, students explore with the school counselors and the career coordinator, using tools such as Naviance, ASVAB, online interest assessments, career presentations and more. Activities within the advisory program also complement the career exploration programming. The focus initially is on exploration, learning styles and work readiness. In Grade 11 and 12, students have more opportunities; they may participate in job shadows, field work, college visits, career presentations and additional related job experiences. Some of the options grant credit for participation.

## CAREER EXPLORATION: JOB SHADOWS Grades 11-12 Semester $1 / 4$ credit

Enrolled students may participate in two job shadows per academic year obtaining credit upon completion of all requirements. Job shadows allow students to view a snapshot of a career for a day. Students see the day-to-day operations, find out the educational requirements, trends in the industry, work expectations, and network with local employers. Many community employers' welcome students into their business here in Old Lyme and throughout the State. An application is required with follow up on the experience and a formal thank you to the employer.

## CAREER EXPLORATION: FIELD EXPERIENCE Grades 11-12 Sem. or Year $1 / 2$ credit

Students may register for academic credit for placement "in-the-field". In other words, students who work in the community may apply to receive credit. This program acknowledges the practical and relevant work learning they are receiving, not available within the high school. Students who work with area employers develop confidence, responsibility and maturity which translates into better students within the high school. The Career Office is also available to help students find jobs, apply and interview for jobs within the community. Credit is granted on a semester basis if the student has submitted a detailed weekly report of their duties, listing anything particularly challenging or new.

## UNPAID EXPERIENTIAL LEARNING PROGRAM (UELP) Grades 11-12 Sem. Or Year

The Unpaid Experiential Learning Program (UELP) is a non-paid, non-credit opportunity for students who would like to investigate in-depth, a career or occupation that fits their talents, interest and abilities. Like internship programs, this is an active collaboration between students, business/community partners and the School-to Career Coordinator that creates a unique experience for students to develop 21st century skills. The UELP program provides 120 hours to 16 -year-olds (and up) of learning in non-hazardous sites that place emphasis on the skills and competencies required for success after high school. Students will complete weekly reports and a final reflection showcasing their UELP experience, while developing 21st century skills that will help them in planning a future career path, succeed in college, careers and civic life.
Applications and information on all the opportunities are available in the Career Office located in the School Counseling Office.

## COOPERATIVE WORK/EXPERIENCE/DIVERSIFIED OCCUPATIONS (CWEDO)

 Grades 11-12 Sem. Or Year 1 creditThe Cooperative Work Experience/Diversified Occupations (CWEDO) course provides students with essential employment skills. Students learn how to access personal aptitudes and abilities relative to career opportunities, develop skills and strategies necessary for employment acquisition, understand concepts and personal attributes required for employment retention and understand safety and labor laws. Employment skills will be taught in a classroom environment and then the students will be able to implement the skills they learn in the workplace.

Lyme-Old Lyme High School

## SUMMER SCHOOL

A student in Lyme-Old Lyme High School who has failed a course may be able to attend an approved summer school program to make up the credit. In order to be eligible for summer school, the student must pass the subject for at least half the marking periods of the course during the school year. Work done in summer school will be accepted for high school credit, subject to approval of the Summer School Program by the School Counseling Department. Said approval must be obtained prior to Summer School enrollment. There are fees associated with these courses.

The Lyme-Old Lyme High School Summer School program also offers enrichment courses during its summer sessions. These classes are designed to fulfill the $1 / 2$ credit course requirements of the traditional semester course in the duration of one 5 -week intensive summer session. Courses will typically run Tuesday through Friday during the last week of June through the entire month of July. Time blocks are $8: 30 \mathrm{a} . \mathrm{m}$. to $10: 15 \mathrm{a} . \mathrm{m}$. and 10:25 a.m. to $12: 10 \mathrm{p} . \mathrm{m}$. There are fees associated with these courses.

For more accurate course offerings specific to the student registration, reference the brochure as it is released in spring.

## DRIVER EDUCATION

## DRIVER EDUCATION - Offered both semesters

Consists of lectures, demonstrations, group discussions, guest speakers, supplemented by audiovisual material to prepare students for the driving environment. The course also is designed so students will fulfill the basic state requirement of 30 classroom hours of instruction plus 8 hours behind the wheel. No academic transcript credit is offered. This course is offered year-round as a service to the community. For more information, please contact Bill Rayder at extension 1011.
Prerequisite: 16 years of age and payment of fees.

## ELIGIBILITY FOR ATHLETICS (High School)

To maintain eligibility for participation in interscholastic sports, a student-athlete must be passing a minimum of 4 Carnegie* units during each marking period that his/her sport is in session. For fall sports, any upperclassman (grades 10-12) must have received, in the previous year, at least 4 Carnegie units of credit towards graduation requirements. Any student receiving less than 4 Carnegie units of credit from the previous year would be ineligible until the end of the first marking period. At the end of the first marking period, a student athlete would only become eligible if he/she passes 4 Carnegie units of credit during the first marking period. Fourth quarter failures cannot be made up during summer school in order to regain Fall athletic eligibility. Incoming freshmen in the fall season are eligible regardless of their grades from the previous year up until the end of the first marking period. At that point they must receive passing grades in a minimum of 4 Carnegie Units.

To be eligible to begin a Winter sport, a student-athlete must have passed a minimum of 4 Carnegie Units during the $1^{\text {st }}$ marking period. To be eligible to begin a Spring sport, a student athlete must have passed a minimum of 4 Carnegie Units during the $3^{\text {rd }}$ marking period.

An incomplete (I) cannot be counted towards the 4 credits. All incomplete grades must be made up 10 days from the issuance of the report card to be considered for eligibility. A student will not be eligible until the passing grade has been reported to the principal for recording.

Grades become official on the release dates for each marking period, as determined prior to the beginning of the academic year. Release dates may be adjusted to compensate for missed school days due to weather and other phenomena.

A student must be in good standing in both the school and community. A student will not be eligible to participate if the work habits or conduct both in and out of school are such as to make the student undeserving to represent the Core Values and Beliefs of Lyme-Old Lyme High School.

The school administration may declare a student ineligible if it is felt that the student is not taking care of his/her responsibilities both as a student and citizen of Lyme-Old Lyme High School and the community.

* At Lyme-Old Lyme a Carnegie unit would be any class that meets for a minimum of 200 minutes per week. You may combine partial credits to equal a whole. If you have any questions about eligibility for athletics, please do not hesitate to contact the Athletic Director or your school counselor.


## CERTIFYING FUTURE ATHLETIC ELIGIBILITY (College)

The NCAA has established a central clearinghouse to certify athletic eligibility for Divisions I and II.
Certification: All prospective student athletes who intend to participate in Division I or II athletics as freshmen in college must register with and be certified by the NCAA Initial-Eligibility Clearinghouse. To be certified for Division I or II you need to graduate from high school and have a grade-point average in the core curriculum of at least 16 academic courses (as defined by the NCAA) and achieve a qualifying test score on the ACT or SAT. NCAA approved courses are designated with the following symbol throughout the Program of Studies.

The NCAA Initial-Eligibility Form is available on line at www.eligibilitycenter.org. The following informative brochures are also available on the Athletics page of the LOLHS website: Making Sure You Are Eligible to Participate in College Sports and the NCAA Guide for the College Bound Student-Athlete.

## STUDENT SERVICES

## SCHOOL COUNSELING SERVICES

The School Counseling Department at Lyme-Old Lyme High School is an integral part of the total educational experience through which students are committed, with pride and purpose, to becoming skilled problem solvers, effective communicators and contributing citizens. The School Counselors assist students in meeting their academic, personal and career goals and responsibilities. The School Counselors not only confer with students individually, but provide a myriad of services to assist students: implementation of a comprehensive School Counseling Program through classroom presentations, individual planning, responsive services, collaboration within and outside the school community and communication with parents/guardians.

School Counseling programs and events are updated and publicized through the School Counseling web page and on-going communications with parents and students. The Naviance Student online post-high school planning tool is a valuable resource and communication tool for both students and parents regarding the various aspects of post high school planning including college and career searches, self-assessment questionnaires, financial aid, scholarships, and resume building information.

Students are encouraged to take full advantage of the School Counseling Services and should feel free to contact their School Counselor regularly for assistance.

## VOCATIONAL TECHNICAL/AGRICULTURAL OPTIONS

Students interested in full-time involvement in trade, technical or agricultural programs should consider making applications to Ella Grasso-Southeastern Regional Technical School, Norwich Regional Technical School, Vinal Satellite Technical School, or the Ledyard High School Vocational-Agricultural Program. For more information or applications, please see your School Counselor.


#### Abstract

ADVISORY PROGRAM

The Lyme-Old Lyme High School Advisory Program is designed to break down our larger community into smaller communities where all students have a consistent mentor and group over the course of their high school careers. During Advisory, students and advisors are offered ongoing opportunities to participate in developmental programing that is directly connected to our mission of creating a community of learners committed, with pride and purpose, to developing skilled problem solvers, effective communicators, and contributing citizens.


## SPECIAL SERVICES

A student experiencing difficulty in his/her academic program may be referred to a Child Study Team (CST) by a teacher, parent, other school personnel, or the student him/herself. A CST consists of the parent/guardian, student when appropriate, and members of the school faculty involved in delivering various education services. An assessment of present functioning in school is made as well as a review of available records. Alternate educational strategies can be recommended and implemented. If a student needs additional assistance, the CST can recommend proceeding to a referral meeting for either 504 services or Special Education.

If a student is found to qualify for 504 services, a 504 Plan will be created to include accommodations necessary to provide access to educational services.

If a student is found to be eligible for Special Education services, an Individualized Educational Program (IEP) is written by the Planning and Placement Team (PPT).

## GRADE LEVELS FOR ELECTIVES

|  | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{F}{6}$ | Advanced Drawing Advanced Painting Ceramic Arts Intro to Ceram./3D Design Intro to Digital Media Intro to Drawing Intro to Painting | Advanced Ceramic Arts Adv. Digital Media: Animation \& Game Des. <br> Adv. Digital Media: Graphic Design ECE Drawing <br> And all Gr. 9 Electives | AP 2D Design <br> AP 3D Design <br> AP Drawing <br> L1 Portfolio Dev. <br> And all Grade 9 \& 10 Electives | All Electives Available |
|  | Accounting <br> Computer Prog. Design <br> Entrepreneurship <br> International Business <br> Intro to Accounting <br> Investments <br> Java Programming <br> LOLHS Store <br> Management <br> Marketing <br> Microsoft Office Cert. <br> Personal/Cons. Law <br> Personal Finance <br> Social Media/ECommerce <br> Web Design | Advanced Accounting <br> And all Gr. 9 Electives | Accounting Applications Cyber Security <br> Fundamentals <br> AP Computer Science A <br> Career Exploration: Job <br> Shadows <br> Career Exploration: Field Work <br> Cooperative Work <br> Experience/ <br> Diversified <br> Occupations <br> (CWEDO) <br> And all Grade 9 \& 10 Electives | All Electives Available |
|  | L2 Creative Writing I <br> L2 Media Literacy | L2 Creative Writing II <br> And all Gr. 9 Electives | L1 Humanities <br> And all Grade 9 \& 10 Electives | L2 Writing and Communication <br> All Electives Available |
| $\begin{aligned} & \mathbb{E} \\ & \underset{y y y}{E} \end{aligned}$ |  |  | AP Calculus AP Statistics L2 Statistics | All Electives Available |
| $\begin{aligned} & U \\ & \underset{\sim}{n} \\ & \underset{B}{2} \end{aligned}$ | Basic Musicianship Jazz Ensemble Intro to Music Apprec. Soprano/Alto Ensemble Select Singers (by audition) Show Band (by audition) Symphonic Band Tenor/Bass Ensemble Wind Ensemble (at director discretion) | ECE/Music Appreciation Music Theory I ECE Fundamentals of Music Musical Performance Music Production <br> And all Gr. 9 Electives | AP Music Theory Concert Chorus <br> All Electives Available | All Electives Available |


|  | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \underline{y} \\ & \underset{y}{4} \\ & \underset{\sim}{6} \end{aligned}$ | L2 Astronomy | L2 Environmental Science <br> L2 Forensic Science <br> L2 Marine Science <br> L2 Conc. Physics <br> And all Gr. 9 Electives | AP/ECE Biology <br> AP Chemistry <br> AP Computer Science A <br> AP/ECE Physics II <br> ECE Physics <br> AP Computer Science A <br> All Electives Available | All Electives Available |
|  |  | AP European History | AP Psychology <br> AP US History <br> L1 Global Issues <br> L2 American History through Film L2 Intro to Psychology | L1 Principles of Economics <br> All Electives Available |
|  | Advanced Video <br> Production <br> Engineering Design (CAD) <br> Introduction to <br> Engineering <br> Technology <br> Video Production | Adv. Engineer Des. (CAD) Alternative Energy <br> Architectural Des. (CAD) <br> CNC Technology <br> Digital Photography <br> Electrical Energy <br> Marine Transportation <br> Robotics Technology <br> Small Gas Engines <br> Woodworking Technology <br> And all Gr. 9 Electives | Adv. Topics in Digital Photography Adv. Woodworking Technology. Electric Vehicle Design <br> And all Grade 9 \& 10 Electives | All Electives Available |
|  | L2 Chinese Language and Culture I <br> L2 French I-II <br> L2 Latin I <br> L2 Spanish I <br> L2 Spanish II <br> L1 Spanish III <br> Appropriate language levels based on prerequisite courses, or assessment of native speaker abilities. | L2 Chinese Language and Culture II <br> L1 French III <br> L2 Latin II <br> L1 Spanish IV <br> And all Gr. 9 Electives | L1 Chinese III <br> L1 French IV <br> ECE French <br> Grammar/Comp <br> L1 Latin III <br> ECE Spanish: <br> Conv./Cultural <br> Topics <br> And all Grade 9 \& 10 Electives | Chinese IV <br> ECE Int. Chinese II <br> Chinese VIAP <br> AP French <br> ECE French Cult. I <br> L1 Latin IV <br> ECE Adv. Topics in <br> Latin <br> AP Spanish/ ECE <br> Intermediate <br> Composition <br> All Electives Available |

Grades 9-12
Year
1 credit
This course introduces students to the fascinating world of digital art and animation using the Mac computer, digital drawing tablets, and Adobe Photoshop, Illustrator and Flash software. Students express visual creativity and explore a variety of techniques including digital drawing, digital photography, image manipulation, digital painting, and Flash animation. Students will also be introduced to 3D modeling and navigating in a 3D environment using Luxology's Modo, an industry-leading software. Assignments will include, but are not limited to, digital illustrations, digital portraits, digital greeting cards, digital collage/montage and short animation. Introduction to Digital Art provides an ideal foundation for all graphic design and animation/gaming classes.


## ADVANCED DIGITAL MEDIA: ANIMATION \& GAME DESIGN

Grades 10-12 Semester $\quad 1 / 2$ credit
Students continue to explore the possibilities of computer-generated and -enhanced design, creating innovative and expressive short animations, digital video, 3D modeling, game design and more challenging experiences in digital art media. Students will learn to use 3D software to create art, character modeling, game elements and 3D animation through the use of techniques like subdivision modeling, UV texture mapping and rigging. Students may plan and execute animation portfolios and playable video games by enrolling in multiple semesters of this course. Software will include the Adobe Creative Suite as well as Luxology's Modo, Blender, Game Salad and Unity (3D game engine). This course may be taken multiple times to continue skill advancement.
Prerequisite: Introduction to Digital Media or Introduction to Digital Art


## ADVANCED DIGITAL MEDIA: GRAPHIC DESIGN $\quad$ Grades 10-12 $\quad$ Semester $1 / 2$ credit

Students will learn the skills required to create professional-looking web pages, brochures, package designs, posters and other dynamic combinations of text and image. The elements and principles of design will be used to create and assess these graphic presentations. As our world is continually becoming more visual, this course will focus on visual literacy as well as the ability to express ideas and concepts through imagery, including digital illustration and typography. Creating a hierarchy of ideas will play an important role, as students learn to consider the demands of advertisers and other commercial clients. A variety of digital media will be incorporated using the Adobe Creative Suite software. Students enrolling in multiple semesters of this course may elect to create an illustrated book, web-site or graphic design portfolio. This course may be taken multiple times to continue skill advancement.
Prerequisite: Introduction to Digital Media or Introduction to Digital Art


## INTRODUCTION TO CERAMIC ARTS AND 3-D DESIGN Grades 9-12 Semester ½ credit

Introduction to Ceramic Arts and 3-D design is a prerequisite for all further ceramic and sculpture study at the high school, and provides students the opportunity to explore various sculpture techniques. This course includes three-dimensional experiences in both ceramics and sculptural media. Ceramic experiences will include hand-built coil and slab construction as well as potter's wheel and glazing techniques. Additive and subtractive sculpture technique will be included using media such as paper and balsa foam. Continued study second semester in Ceramic Arts is highly recommended.

This continuation of Introduction to Ceramic Arts and 3-D Design offers students more challenging experiences in clay. Students will apply the skills and techniques learned in the introductory class to work on functional pottery with emphasis placed on larger scale work with more complex building methods and will explore a variety of decoration techniques including textural treatment, underglaze, engobes, and glazes. Experiences will include continued skill building with the potter's wheel as well as alternative methods of firing clay including outdoor pit firing and Raku firing.
Prerequisite: Introduction to Ceramic Arts and 3-D Design

## ADVANCED CERAMIC ARTS Grades 10-12 Semester 1⁄2 credit

This class is designed for the advanced ceramic student interested in continuing challenging assignments. Students will explore advanced hand building techniques, production pottery techniques, wheel throwing, various glazing and decorating techniques, slip and glaze formulation, and kiln construction, as well as a variety of alternative firing techniques. Students will study ceramics in-depth, and explore materials and create works from the imagination. Students in this class will be responsible for the construction and firing of our Pit and Raku kilns during our annual Raku Day. High standards of safety and craftsmanship will be expected. Students maintaining an average of 80 or above may enroll in multiple semesters of this course.
Prerequisite: Ceramic Arts

## Performance Graduation Requirement: Creativity and Innovation

HM

## INTRODUCTION TO DRAWING

## Grades 9-12

Semester
$1 / 2$ credit
Introduction to Drawing lays the foundation for all further study in Drawing and Painting, and also develops skills that are useful for digital animation, illustration and game design. During the first quarter we will explore various ways of projecting three-dimensional information onto two-dimensional surfaces, including isometric and one-point perspective. The second quarter focuses on values and shading, especially techniques for creating realistic charcoal drawings, as well as an introduction to portrait drawing. No previous drawing experience or expertise is required for success in this class.

Performance Graduation Requirement: Creativity and Innovation

## INTRODUCTION TO PAINTING

Semester $\quad 1 / 2$ credit
Introduction to Painting is a prerequisite for all further painting study at the high school. During the first quarter we will use brush technique, color theory, and design skills, learning to mix and precisely match colors and creating large color wheels. In the second quarter students will create a copy in oils of a master painting using detailed digital references from the Google Art Project.
ADVANCED DRAWING Grades 9-12 Semester 1⁄2 credit

Advanced Drawing includes work in two-point perspective, value studies from plaster casts, studies of the human head and figure, topics in anatomy and proportion, and explorations of diverse drawing media. Students will choose a particular area of interest for each semester that they take the class and are encouraged to sign up for multiple semesters provided that they maintain an average of 80 or above.
Prerequisite: Introduction to Drawing
Performance Graduation Requirement: Creativity and Innovation


#### Abstract

ADVANCED PAINTING Grades 9-12 Semester $1 / 2$ credit The first semester of Advanced Painting focuses on the use of underpaintings to complete a series of observational oil paintings, first in grisaille (black, white and gray) and finally in full color. Students repeating the class will have opportunities to pursue individualized goals, including abstract paintings, narrative paintings from photographs and/or life studies, or portrait paintings in media including acrylic, airbrush and/or gouache. An average of 80 or above is required for enrolling in multiple semesters of this course. Prerequisite: Introduction to Painting and Introduction to Drawing


Performance Graduation Requirement: Creativity and Innovation

## ECE: DRAWING

## Grades 10-12 Year 1 credit/3 UCONN credits

Students who have completed at least one semester of Advanced Drawing or have the teacher's recommendation may commit to a year of drawing study for University of Connecticut credit in Art 1030 under the Early College Experience program. The advanced work from direct observation created in this class is suited for college admissions portfolios, and can also lay the groundwork for an AP Drawing portfolio.
Prerequisite: Advanced Drawing or permission of instructor

Performance Graduation Requirement: Creativity and Innovation

## L1 ADVANCED PORTFOLIO DEVELOPMENT Grades 11-12 Sem. Or Year ½ or 1 credit

Students who have completed Advanced Drawing, ECE Drawing, or Advanced Painting may commit to a year of study aimed at developing a portfolio for college applications. This course will meet concurrently with AP Drawing. L1 Advanced Portfolio, however, unlike AP, will require completion of specific in-class and homework assignments in gouache, acrylic, charcoal, pen $\&$ ink and etching, with not more than one hour of homework per week. This course is recommended for $11^{\text {th }}$ graders who are planning to take AP Drawing as a senior, and who can use the year to work in a wide range of media and styles while developing ideas and artworks to use in their AP concentrations.
Prerequisite: Advanced Drawing, ECE Drawing, or Advanced Painting
Performance Graduation Requirement: Creativity and Innovation

## AP STUDIO ART

## Grades 11-12

Year
1 credit
Students with extensive experience in Drawing, Painting, Sculpture, Digital Art, Ceramics, Graphic Design and/or Photography may commit to a year of study aimed at completing an Advanced Placement portfolio, with written commentary, in Drawing, 2-D Design or 3-D Design. These three concentrations have different prerequisites (see below) however students do not have to make a final decision about the portfolio they wish to complete until 2nd quarter. AP Studio Art students, in all concentrations, will participate in critiques together and will have access to all Art Department resources and teachers. Artwork completed in previous years may be included so long as they are consistent with the required theme: a "sustained investigation" of either media and/or motif that is driven exclusively by the student's own creative choices. Completion of this body of work will require an outside of class commitment of at least 3 hours/week. Experimentation with media and a variety of techniques is essential. Completed portfolios are scored by the College Board and may be granted college credit by participating colleges and universities. Finally, while AP Studio Art may be repeated by students choosing new concentrations (as reflected on student transcripts), work from prior years may not be resubmitted to the College Board.

Prerequisite (Drawing): Advanced Portfolio Development or at least 3 semesters of Drawing and/or Painting.
Prerequisite (2D Design): Introduction to Digital Art or Introduction to Drawing and demonstrated experience with photography leading to teacher recommendation.
Prerequisite (3D Design): Two semesters of Ceramics classes or teacher recommendation.

## COMPUTER AND BUSINESS/MANAGEMENT SCIENCES

| Finance Courses* | Marketing Courses* | Programming Courses* | Other Course <br> Offerings* |
| :--- | :--- | :--- | :--- |
| Accounting | Marketing <br> Offered in 2022-2023 | Computer Program <br> Design <br> Offered in 2022-2023 | Microsoft Office <br> Certification |
| Advanced Accounting | Management | Java Programming | International Business <br> Offered in 2022-2023 |
| Introduction to <br> Accounting | Social Media/E-Commerce | Cyber Security <br> Fundamentals | Personal and Consumer <br> Law |
| Accounting <br> Applications | Entrepreneurship <br> Offered in 2022-2023 | Web Design | Cooperative Work <br> Experience/Diversified <br> Occupations (CWEDO) |
| Personal Finance | LOLHS Student Store | AP Computer Science A |  |
| Investments <br> Offered in 2022-2023 |  |  |  |

*All courses, unless otherwise noted, are appropriate for Grades 9-12 and represent computer-based curriculums.
The Computer and Business/Management Sciences Department is designed to respond to the multi-disciplinary needs of today's students. Computer science and business/management science blends a host of coursework and opportunities to properly equip students for professional, home, business, technological, and collegiate computer applications in the $21^{\text {st }}$ Century.

## HIGH SCHOOL 101

Grade $9 \quad$ Semester $\quad 1 / 2$ credit

High School 101 is designed to support students' successful transition from middle school to high school. In HS 101, students enhance their skills in studying, organization and technology. The course introduces the student to career planning and a student success plan is developed. The skills gained in this class compliment the Lyme-Old Lyme High School curricula in all subject areas. This is a required course and all freshmen are automatically enrolled.

## INTRODUCTION TO ACCOUNTING

## Grades 9-12

Semester
$1 / 2$ credit
This course is designed to introduce the basic concepts of accounting (keeping the financial records of a business). Students will be introduced to the accounting practices of a service business. Students who have taken this course usually qualify for Advanced Accounting; see the instructor for details.

## Performance Graduation Requirement: Critical Thinking

## ACCOUNTING

## Grades 9-12

Year
1 credit

This course is designed to introduce the basic concepts of accounting (keeping the financial records of a business). Time will be spent analyzing data for both a services business and a merchandising business. Students taking this course qualify for Advanced Accounting.

This course is a continuation of Accounting with all applications being done on the computer.
Prerequisite: Accounting or Introduction to Accounting (see instructor for details).
Performance Graduation Requirement: Critical Thinking

## ACCOUNTING APPLICATIONS

## Grades 11-12 $\quad$ Semester $1 / 2$ or 1 credit

Accounting Applications is offered for those students who have completed Advanced Accounting and want to pursue further accounting options; it may be taken for a semester or a full year. Accounting Applications is offered by arrangement and with permission of the instructor.

## Performance Graduation Requirement: Critical Thinking

## PERSONAL FINANCE <br> Grades 9-12 <br> Semester <br> $1 / 2$ credit

This course will provide students with the knowledge and skills necessary to manage their personal finances effectively. Students learn practical "real life" skills which they can utilize throughout their lives. Topics for this course include: banking and savings, checking accounts, credit, completing income tax returns for an individual, calculating gross and net pay, buying a car, budgeting, insurance, investments, making decisions, setting goals, becoming an informed consumer, and exploring careers. Students attending New England Technical Institute, upon LOLHS graduation, will receive credit from the college for this class.

## Performance Graduation Requirement: Critical Thinking

## INVESTMENTS <br> Grades 9-12 <br> Semester $\quad 1 / 2$ credit

Students will learn how to invest money and about the different financial options. Students will evaluate and analyze many investment options such as stocks and the operations of the stock market, bonds, mutual funds, and real estate, as well as speculative investments and how to incorporate them into an investment portfolio. Students participate in the Stock Market Game. Offered in 2022-2023

## Performance Graduation Requirement: Critical Thinking

## SOCIAL MEDIA/ E-COMMERCE

Grades 9-12
Semester $\quad 1 / 2$ credit
This course is designed to offer students an opportunity to learn how to create an internet-based business while examining the appropriate marketing techniques to do so. Working in teams, students will evaluate and research other internet businesses, learn the use and applications of social media marketing (such as Facebook and Twitter), use various means of collaboration (including chat, e-mail, and discussion boards), work in an on-line community, become familiar with open-source software, and understand the history of the World Wide Web.

## Performance Graduation Requirement: Communication

## MARKETING

## Grades 9-12

Semester
$1 / 2$ credit
This Marketing class provides an opportunity to learn about this possible career path. The course introduces students to market trends, market research, and the role of promotion in the business world. Students will create marketing plans, surveys, and campaigns. Offered in 2022-2023

Performance Graduation Requirement: Communication

What is management? What does a manager do? What will you do if you are become manager? Management is designed to meet the needs of students wishing to discover not only what a manager does but also decide if this could be a career path for them. During this course, students will learn how to organize staff and direct a company as well as how to respond to the needs of management.

## Performance Graduation Requirement: Communication

## ENTREPRENEURSHIP

## Grades 9-12

Semester
$1 / 2$ credit
What is Entrepreneurship? How does someone become an entrepreneur? Should I own my own on-line or brick and mortar business? Entrepreneurship is designed to meet the needs of students who are thinking about owning or working for a business whether on-line or actual store front. In this course, students will obtain knowledge necessary for all aspects of opening a business or functioning as a self-employed professional. Students will work on creating a business from the beginning including creating a business plan, researching similar businesses, checking licensing, working on a budget, etc. Offered in 2022-2023

## 

## CYBER SECURITY FUNDAMENTALS Grades 11-12 Semester 1⁄2 credit

This course will provide an introduction to the technical background required to provide solutions to many cyber security problems. This background includes: binary/hex number systems, operating system concepts, file systems, OSI model, network topologies and protocols. The material will be presented in the context of its necessity for providing cyber security solutions. There will also be an introduction to Python programming language as it relates to cyber security.

| Performance Graduation Requirement: Critical Thinking | sTEM |
| :--- | :--- |

JAVA PROGRAMMING Grades 9-12 Semester 1⁄2 credit
Java Programming is a one semester course emphasizing the fundamentals of object-oriented programming using the language of Java. Topics will be taught emphasizing STEM domains and will include, but are not limited to: data types, variables, arithmetic operations, strings, methods and arrays.

| Performance Graduation Requirement: Critical Thinking | STEM |
| :--- | :--- |

## COMPUTER PROGRAM DESIGN

## Grades 9-12 $\quad$ Semester $\quad 1 / 2$ credit

In this course students will learn the fundamental concepts of programming using Python and C++. Students will learn the fundamental concepts of programming so that this knowledge can be applied to other programming languages. The student will be taught to analyze a programming problem, design a logical solution, and write and execute the program using Python and C++. Offered in 2022-2023

| Performance Graduation Requirement: Critical Thinking | STEM |
| :--- | :--- | :--- |

## WEB DESIGN

Semester
$1 / 2$ credit
The objective of this course is to provide students with the skills necessary to design, create and maintain web sites. An understanding of how a web site operates and an overview of the HTML language will assist students in developing and maintaining web sites for a variety of organizations. Students will create their own web page. Students with a grade of C or better in the class, who are enrolled in the College Career Pathways program, receive credit from Three Rivers Community College.

Performance Graduation Requirement: Critical Thinking

AP Computer Science A is an introductory college-level computer programming course that focuses on problem solving through the use of computer programming. The course follows the College Board's AP Computer Science curriculum, with a goal of preparing students for the AP Computer Science A exam. Students will understand and be able to use the concepts, techniques, and skills typically covered in a typical college-level introductory computer science course. Specifically, students will be able to analyze problems and design and implement software solutions to these problems using an object-oriented approach. Students will become sufficient in writing, executing, testing, and debugging programs in the Java programming language.
Prerequisite: L2 Algebra II with a final grade of A- or higher OR L1 Algebra II with a final grade of B- or higher. Prior programming experience is preferred but not required.

## Performance Graduation Requirement: Critical Thinking and Collaboration

STEM

## INTERNATIONAL BUSINESS Grades 9-12 Semester 1/2 credit

International Business emphasizes the methods of conducting business in a global economy and will include an overview of marketing, management, ethics, global markets, e-marketing, and the etiquette involved in conducting business in another country. The forces that influence international business (social, economic, political as well as cultural awareness) and global issues will be examined along with current international business trends and the developments that go along with operating a business overseas. Offered in 2022-2023

## Performance Graduation Requirement: Communication

STEM

## MICROSOFT OFFICE CERTIFICATION

Grades 9-12 $\quad$ Semester $\quad 1 / 2$ credit

Many college courses assume that students are proficient with Microsoft Office Pro. This course will teach students what they need to know in Microsoft Word, Excel, and PowerPoint and help them improve their computer software skills for college assignments and the working world. For example, students will learn how to create a mail merge, a resume for applying to college or for a job, and advanced presentation skills. Students will also sit for the Microsoft Office User Specialist Exam (MOS) in Word, Excel and PowerPoint. Upon passing the MOS exam students may apply for college credit at some universities.


## PERSONAL AND CONSUMER LAW

## Grades 9-12

Semester
$1 / 2$ credit
Personal and Consumer Law is a practical-use course designed to equip students to meet and solve problems involving legal principles and issues in everyday life. Topics will include the development of law, consumer law, small claims court, common civil lawsuits, landlord/tenant relationships, family law, law in the workplace, contracts, bankruptcy and cyber law.

Performance Graduation Requirement: Communication

## LOLHS STUDENT STORE

## Grades 9-12

## Credit varies, by arrangement

The Student Store offers a practical application of business theory and techniques. This is an opportunity for hands-on retail experience. All enrolled students will be asked to participate in an application and interview process that will determine their schedule and credit.

# ENGLISH 

## L2 ENGLISH 9

Grade 9
Year
1 credit
English 9, level two, is designed to challenge students and encourage them to become independent readers and writers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a moderate amount of reading, 15-20 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for the $9^{\text {th }}$ grade is analytical, and also includes narrative and expository pieces. One three to five page formal research paper is required.
Prerequisite: Recommendation of eighth-grade teacher based on placement assessment.


## L1 ENGLISH 9

Grade 9
Year
1 credit
English 9, level one, is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a substantial amount of reading, 2030 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for the $9^{\text {th }}$ grade is analytical. One formal four to six page research paper is required.
Prerequisite: Recommendation of eighth-grade teacher based on placement assessment.
Performance Graduation Requirement: Communication \& Critical Thinking
HM

Grade 10
Year
1 credit

## L2 ENGLISH 10

,
English 10, level two, is designed to challenge students and encourage them to become independent readers and writers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a moderate amount of reading, 15-20 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for the $10^{\text {th }}$ grade is analytical. One four to five page formal research paper is required.
Prerequisite: Teacher recommendation based on assessment data and proficiency in $21{ }^{\text {st }}$ Century Skills.


HM

English 10, level one, is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a substantial amount of reading, 2030 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for grade 10 is literary analysis. One formal five to seven page research paper is required.
Prerequisite: Teacher recommendation based on an 87 average in L1 English 9, or 93 average in L2 English 9, assessment data and proficiency in $21^{\text {st }}$ Century Skills.

## Performance Graduation Requirement: Communication \& Critical Thinking

HM

## L2 ENGLISH 11

## Grade 11

Year
1 credit
English 11, level two, is designed to challenge students and encourage them to become independent readers and writers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a moderate amount of reading, 15-20 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for the $11^{\text {th }}$ grade is analytical.
Prerequisite: Teacher recommendation based on assessment data and proficiency in $21^{\text {st }}$ Century Skills.


## L1 ENGLISH 11 <br> Grade 11 <br> Year <br> 1 credit

English 11, level one, is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical reading, writing, vocabulary and grammar. Literature is the core of the course, and students are expected to complete a substantial amount of reading, 2030 pages, every night. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. In addition, students periodically participate in Independent Reading. The writing focus for the $11^{\text {th }}$ grade is analytical. One formal eight to ten page Critical Theory Research Paper is required.
Prerequisite: Teacher recommendation based on an 87 average in L1 English 10, or 93 average in L2 English 10, assessment data and proficiency in $21^{\text {st }}$ Century Skills

Performance Graduation Requirement: Communication \& Critical Thinking
HM

English 12, level two, is designed to challenge students and prepare them for college level English classes. The pace of the course is appropriate for college-bound students and emphasizes the continued development of critical reading, writing, and speaking. Instruction in style, grammar, vocabulary and writing are included. Literature is the core of the course, and students are expected to complete a moderate amount of reading nightly. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. The course also includes a second semester Senior Project, an independent "I" search model that culminates with an oral presentation. The project includes a presentation, a journal, and an eight to ten page paper. Students also participate in Independent Reading.
Prerequisite: Teacher recommendation based on assessment data and proficiency in $21^{\text {st }}$ Century Skills.

| Performance Graduation Requirement: Communication \& Critical Thinking | HM | w |
| :--- | :--- | :--- |

## L1 ENGLISH 12 <br> Grade 12 <br> Year <br> 1 credit

English 12 level one is designed to challenge highly motivated students who can consistently and independently meet course expectations, as well as challenge students and prepare them for college-level English classes. The pace of the course is rigorous and emphasizes the continued development of critical reading, writing, and speaking. Instruction in style, grammar, vocabulary and writing are included. Literature is the core of the course, and students are expected to complete a substantial amount of reading, 20-30 pages, nightly. The selections vary in genre and style, ranging from classical literature to contemporary fiction and nonfiction pieces. All texts are chosen for their complexity in order to provide an opportunity for analysis and critical thinking. Communication skills are developed through oral presentations and student-led discussions. The course also includes a second semester Senior Project, an independent " $I$ " search model that culminates with an oral presentation. The project includes a presentation, a journal, and an eight to ten page paper. Students also participate in Independent Reading.
Prerequisite: Teacher recommendation based on an 87 average in L1 English 11, or 93 average in L2 English 11, assessment data and proficiency in $21^{\text {st }}$ Century Skills

## Performance Graduation Requirement: Communication \& Critical Thinking

HM

## ECE: SEMINAR IN WRITING THROUGH LITERATURE Grade 12 Year 1 credit/

UConn Early College Experience (ECE) Seminar in Writing through Literature is designed to challenge students and prepare them for college level English classes. The pace of the course is rigorous and emphasizes the continued development of critical reading, writing, and speaking. Grammar, style, and vocabulary are included. Students are expected to complete a substantial amount of reading nightly (15-25 pages) as the literature and its companion texts are essential to the writing and thinking of this course. Students will study predominantly British Literature, and the approach is thematic. Oral participation, performance tasks, and Socratic Circles are integral components of this course. Students have the option to participate in the Early College Experience program, through which they will gain UConn college credit for the course (equivalent to UConn's English 1011). The writing for the course is considerable, and students who opt for ECE must complete a minimum of 30 edited, polished pages of writing over the course of the year, which writing will be graded as college-level pieces. The course also includes a second semester Senior Project, an independent "I" search model that culminates with an oral presentation. The project includes a presentation, a journal, and an eight to ten-page paper. Students also participate in Independent Reading. Course may be taught concurrently with L1 English 12. Required Summer Reading books are assigned and assessments are given in September. Prerequisite: Teacher recommendation based on an 87 average in L1 English 11, or 93 average in L2 English 11, assessment data and proficiency in $21^{\text {st }}$ Century Skills

AP ENGLISH LITERATURE AND COMPOSITION
Grade 12
Year
1 credit
In this course, students are engaged in the careful reading of many literary works. Students study the individual work, its language, characters, actions and themes. Each work's structure, meaning, values and relationship to contemporary experience as well as to the times in which it was written is also discussed. Texts are representative of various genres and periods and recognized for their literary merit. The AP course stresses close study of works from English, American and World traditions. Rigorous weekly writing assignments, oral participation, Socratic Circles, and independent study are integral components of this course. The course also includes a second semester Senior Project, an independent " $I$ " search model that culminates with an oral presentation. The project includes a presentation, a journal and an eight to ten page paper. Required Summer Reading books are assigned and assessments are given in September.
Prerequisite: Teacher recommendation based on a 93 average in L1 English 11.


## L2 CREATIVE WRITING I

Grades 9-12
Semester
$1 / 2$ credit
Creative Writing I focuses on student generated, creative writing projects and is designed for the self-motivated student who is interested in writing beyond the Standard English curriculum. A variety of writing genres are explored throughout the semester. A Writer's Workshop model is used for sharing student writing. Students are required to create writing portfolios showcasing their growth as writers. A field trip to the Shoreline Writer's Conference is offered to interested students. This is an elective course which cannot be taken in place of a required English course.
Prerequisite: Teacher recommendation


HM

## L2 CREATIVE WRITING II

## Grades 10-12

## Semester

$1 / 2$ credit
Creative Writing II is a continuation of Creative Writing I. Students are expected to complete longer assignments and to work more independently. Students continue to explore the literary worlds of fiction, non-fiction, poetry and drama throughout the semester. During the first quarter of class, new genres, such as science-fiction, Beat Poetry, allegory, and satire, will be explored. A portion of the course will be dedicated to writing one longer work ( $80-100$ pages). This work may be a novel, play, memoir, or collection of poetry. Students continue to workshop their written work in class. This is an elective course which cannot be taken in place of a required English course.
Prerequisite: Creative Writing I and teacher recommendation
Performance Graduation Requirement: Creativity and Innovation

## L2 MEDIA LITERACY

## Grades 9-12

Semester
$1 / 2$ credit
This course is designed to teach students to understand the history and evolution of cinema, television, radio, the Internet, the music industry, newspapers, and magazines. Students will critically view these media and learn how they influence American ideals, democracy, lifestyles, and culture. The media's direct and indirect messages will be critically analyzed. Students will also create their own forms of media to convey their own direct and indirect messages. The allotment of time to each unit in this class is left to the individual teacher's discretion and will be based on the class's needs. This is an elective course which cannot be taken in place of a required English course.
Prerequisite: Teacher recommendation

This course is intended to acquaint students with the ways in which man has expressed himself through various forms of art, music, literature and philosophy. The course explores how the concept of humanism has changed from its origins in Ancient Greece, through the Renaissance, Baroque, Romantic and Modern Periods. Humanities is an activity related course in which emphasis is placed on student participation in class seminars, discussions, field trips, and workshops. Being exposed to creative processes and varied experiences, students will be introduced to the intellectual and artistic achievements of mankind. The course requires a variety of assignments including research projects, PowerPoints, short essays and tests. The culminating activity asks students to synthesize their understanding of discourse by independently exploring a modern literary work. This is an elective course which cannot be taken in place of a required English course.
Prerequisite: Teacher recommendation
Performance Graduation Requirement: Communication

## L2 WRITING \& COMMUNICATION FOR THE REAL WORLD

## Grade 12

Semester
$1 / 2$ credit
Writing and Communication for the Real World is a full semester course offered during the fall semester. Students are expected to manage class time and meet course expectations and assignment deadlines consistently and independently. Homework is assigned as students are expected to do work outside of class. At the start of quarter one, each student shapes curricular goals as pertinent to his or her post-secondary plans. Students then engage in a variety of writing assignments including resumes, college essays, and short answers. Quarter two transitions to a mastery of real-world communication skills, including a public speaking unit which culminates with a student created TED Talk and written reflection. The course is taught by an English teacher, as well as a member of the School Counselling Department, during the college application process.
This is an elective course which cannot be taken in place of a required English course.
Prerequisite: Teacher recommendation

## MATHEMATICS

## L2 ALGEBRA I

This course offers a fundamental program of study where students will increase their knowledge and understanding of mathematical ideas and concepts. The course is designed to introduce foundations of Algebra and is aligned with the Common Core State Standards. The course begins with a study of the number system, linear equations and inequalities, and functions. Other important topics include linear functions, scatter plots and trend lines, systems of linear equations, and an introduction to quadratic functions. Performance tasks and real-world applications are integrated throughout the course. The use of graphing calculator technology will be introduced. The college-preparatory course is taught at a pace and depth appropriate for the students' ability.
Prerequisite: Completion of Pre-Algebra (Middle School)

## Performance Graduation Requirement: Critical Thinking

## L2 ALGEBRA I LAB

Year
$1 / 2$ credit
This lab is designed to reinforce skills learned in the L2 Algebra I class that will be take concurrently. The lab uses a more hands-on/lab based approach and basic reinforcement is provided through in-class re-teaching, Khan Academy and/or Aleks program.
Prerequisite: Successful completion of Pre-Algebra (Middle School) and recommendation by the middle school teacher.

$$
\begin{array}{|l|l|l|}
\hline \text { Performance Graduation Requirement: Critical Thinking } & \text { sTEM } \\
\hline
\end{array}
$$

## L1 ALGEBRA I

## Year

1 credit
This course offers a rigorous program of study where students will increase their knowledge and understanding of mathematical ideas and concepts. The course focuses on the foundations of Algebra and is aligned with the Common Core State Standards. The course begins with a study of the number system, linear equations and inequalities, and functions. Other important topics include linear functions, scatter plots and trend lines, systems of linear equations, exponential functions, and quadratic functions. Performance tasks and real-world applications are integrated throughout the course. The use of graphing calculator technology will be introduced.
Prerequisite: Grade of 90 in Pre-Algebra (Middle School) and/or teacher recommendation

```
Performance Graduation Requirement: Critical Thinking
    STEM
```


## L2 GEOMETRY

Year
1 credit
This course, aligned with the Common Core State Standards, is designed to explore the nature of mathematical systems through the use of inductive and deductive reasoning. Students will justify statements through the use of postulates and theorems. Geometric concepts will be examined through topics of congruency, similarity, polygons, and circles. Plane Geometry and is extended to Solid Geometry to strengthen visual and spatial relationships with a focus on area and volumes. Fundamental trigonometric relationships with be introduced. Students will explore problems related to real-world applications. The collegepreparatory course is taught at a pace and depth appropriate for the students' ability.
Prerequisite: Grade of 84 or below in L1 Algebra I or successful completion of L2 Algebra I and teacher recommendation

This class is designed to reinforce skills learned in the L2 Geometry class. It will provide a comprehensive review of the material taught through the use of a more hands-on/lab-based approach and basic reinforcement is provided through in-class teaching, homework assistance, Khan Academy and/or Aleks program.
Prerequisite: Successful completion of L2 Algebra I or L2 Algebra I with Lab and teacher recommendation.

## Performance Graduation Requirement: Critical Thinking

## L1 GEOMETRY

## Year

1 credit
This course, aligned with the Common Core State Standards, is designed to explore the nature of mathematical systems through the use of inductive and deductive reasoning. The logic in deductive reasoning is revealed through recognition of postulates, definitions, and theorems. The course begins with a rigorous study of Plane Geometry which includes congruence, similarity, polygons, and circles. It is extended to Solid Geometry to strengthen visual and spatial relationships with a focus on area and volume of solids. Trigonometric relationships are introduced, and students will explore problems related to real-world applications.
Prerequisite: Grade of 85 or above in L1 Algebra I, or 93 or above in L2 Algebra I and teacher recommendation.

\section*{| Performance Graduation Requirement: Critical Thinking | sTEM |
| :--- | :--- |}

## APPLIED ALGEBRA II

## Year

1 credit
The focus of this course is an in-depth exploration of different applications of patterns, functions and relationships. The instruction and assessments are a combination of skill, applications, and projects. The course addresses Algebra II content, such as linear, quadratic, polynomial, and exponential functions. The use of graphing calculator technology is an essential part of this course.
Prerequisite: Teacher recommendation and successful completion of Algebra 1 and Geometry.

## Performance Graduation Requirement: Critical Thinking, Collaboration

## L2 ALGEBRA II

## Year

1 credit
This course begins with a review of the basic terminology, notation, concepts and applications of Algebra I. The focus of this course is an exploration of different interpretations of patterns, functions and relationships. This is achieved by a more in-depth study of quadratic functions, polynomial functions, and exponential functions. Other topics explored are absolute value functions, piece-wise functions, nth roots, radicals, and logarithmic functions. The use of graphing calculator technology will be a part of this course. The college-preparatory course is taught at a pace and depth appropriate for the students' ability. Prerequisite: Grade of 73 or above in L2 Algebra I, a teacher recommendation, and successful completion of Geometry.


## L1 ALGEBRA II

Year
1 credit
This course begins with a brief review of Algebra 1. The focus of this course is an exploration of different interpretations of patterns, functions and relationships. This is achieved by a rigorous and more in-depth study of quadratic, polynomial, exponential, and piece-wise functions. Other topics studied are logarithmic and rational functions, nth roots, radicals, sequences, series, and trigonometric functions. The use of graphing calculator technology will be an integral part of this course. Prerequisite: Grade of 85 in L1 Algebra I and 85 in L1 Geometry, or 93 or above in L2 Algebra I and 93 in L2 Geometry as well as teacher recommendation

Performance Graduation Requirement: Critical Thinking
STEM

In the first semester, students continue with Algebra II concepts including the study of polynomial, rational and transcendental functions and conic sections. The use of the graphing calculator aids in the analyzing of functions and in real world applications. The second semester is a study of trigonometric functions including inverses, right triangle trigonometry, circular trigonometry, trigonometric laws and identities. The course is taught at a pace and depth more appropriate for students' abilities.
Prerequisite: Grade of 85 or above in L2 Algebra II or teacher recommendation

Performance Graduation Requirement: Critical Thinking
STEM

## L1 PRE-CALCULUS

Year 1 credit

This is a rigorous study of advanced topics in mathematics. In the first semester a continuation of Algebra II concepts includes topics from analytic geometry, study of polynomial, rational and transcendental functions and conic sections. The extensive use of the graphing calculator aids in the analyzing of functions and in real world applications. The second semester is a study of trigonometric functions including inverses, right triangle trigonometry, circular and oblique trigonometry, trigonometric identities, vectors and polar equations.
Prerequisite: Grade of 85 or above in L1 Algebra II or 93 or above in L2 Algebra II and teacher recommendation

| Performance Graduation Requirement: Critical Thinking | STEM |
| :--- | :--- |

## L1 CALCULUS

Year
1 credit
This course introduces the student to the concepts of Calculus at a less stringent pace than AP Calculus. The course will provide the student with a strong background to enable them to take Calculus I in college. Topics included: coordinate geometry, graphs, limits, derivatives, and anti-derivatives of algebraic and trigonometric functions. It also will cover definite and indefinite integrals and their applications, area under curves and volumes of solids of revolution.
Prerequisite: Grade of 85 in L1 Pre-Calculus or 93 in L2 Pre-Calculus and teacher recommendation

\section*{| Performance Graduation Requirement: Critical Thinking | sTEM |
| :--- | :--- |}

## AP CALCULUS (AB)

Grades 11-12
Year
1 credit
This is a college level course that follows the AP Calculus curriculum. The syllabus includes the formal presentation of limits, derivatives, and anti-derivatives of algebraic and trigonometric functions. The syllabus continues with applications of derivatives, definite integrals and their applications, area under curves and volumes of solids of revolution. Students are required to take the AP exam in May for AP credit on their transcripts. Techniques in AP test-taking and scoring methods will also be included. (Students have the option of taking the Calculus $\mathrm{AB} / \mathrm{BC}$ exam, in which case it is recommended that they spend time learning additional topics and meet with the instructor for extra study sessions before the exam)
Prerequisite: Grade of 87 in L1 Pre-Calculus and department recommendation
Performance Graduation Requirement: Critical Thinking
STEM

## L2 STATISTICS

## Grades 11-12

Year
1 credit
This course is an introduction to statistics. The emphasis of this course is to gather and analyze data. Students in this course are asked to think about the designs of the studies which produced the data they are analyzing and to consider the possible effect of the outlying observations on their conclusions. Students are encouraged to attack problems from different angles and to support their conclusions with valid reasoning.
Prerequisite: Grade of 70 or above in Algebra II (L1. L2 or L2 with Lab), or teacher recommendation

```
Performance Graduation Requirement: Critical Thinking

This is a college level course that follows the national AP Statistics curriculum. The emphasis of this course is to introduce students to the major concepts and tools for collecting, analyzing, and making inferences from data. Students in this course are asked to think about the designs of the studies which produced the data they are analyzing and to consider the possible effect of the outlying observations on their conclusions. Students are encouraged to attack problems from different angles and to support their conclusions with valid reasoning. Students are required to take the AP exam in May for national AP credit on their transcripts. Techniques in AP test-taking and scoring methods will also be included.
Prerequisite: Grade of 87 in L1 Algebra II or L1 Pre-Calculus or 93 in L2 Pre-Calculus and department recommendation.
Performance Graduation Requirement: Critical Thinking
STEM

\section*{MUSIC}

SPECIAL NOTE: All performance classes (instrumental and vocal) require some after school hours for rehearsals and performances carrying grade credit.
**Several performance classes offer a Level 1. With teacher recommendation, students may opt to take the course for Level 1 credit, and will need to meet, and be graded by, the additional Level 1 requirements listed. The performance classes are still available to be taken at the regular non-leveled status as well.

\section*{SOPRANO/ALTO CHORUS** Grades 9-10 Year 1 credit}

Designed for the specific developmental needs of the Soprano and Alto voices, the S/A Chorus is open to any Soprano or Alto students in grades nine and ten. The main focus of the class will be on developing the musical talents of each student by studying a wide variety of choral music representing many styles. The student will develop the ability to create music through the use of basic vocal and choral techniques. Additionally, the study of sight singing skills and music theory will develop musical literacy of each student. After school rehearsals and performances are a required part of this class.
This ensemble offers a Level 1 option. Please see the description at the end of the ensemble listings.
***This ensemble can be taken for one semester only ( .5 credit), but students can only have this option for ONE SEMESTER during their high school years.

Performance Graduation Requirement: Collaboration
HM

\section*{TENOR/BASS CHORUS** Grades 9-10 Year 1 credit}

Designed for the developing Tenor and Bass voices, the T/B Chorus is open to any Tenor or Bass students in grades nine and ten. The main focus of the class will be on developing the musical talents of each student. By studying a wide variety of choral music, representing many styles, the student will develop the ability to create music through the use of basic vocal and choral techniques. Additionally, the study of sight singing skills and music theory will develop musical literacy of each student. After school rehearsals and performances are a required part of this class.
This ensemble offers a Level 1 option. Please see the description at the end of the ensemble listings.
***This ensemble can be taken for one semester only (. 5 credit), but students can only have this option for ONE SEMESTER during their high school years.

\section*{Performance Graduation Requirement: Collaboration}

HM

\section*{CONCERT CHORUS** Grades 11-12 Year 1 credit}

The Concert Chorus is an ensemble intended for students who have mastered skills in the prerequisite class. The chorus will study and perform a wide variety of both sacred and secular choral music representing many styles and eras of choral music. Advanced choral techniques will be studied as well as vocal technique, sight singing and performance skills. After school/weekend rehearsals and performances are a required part of this class.
Prerequisite: S/A Chorus or T/B Chorus, or Instructor's permission
This ensemble offers a Level 1 option. Please see the description at the end of the ensemble listings.
*** This ensemble can be taken for one semester only (at .5 credit), but students can only have this option for ONE SEMESTER during their high school years.

Performance Graduation Requirement: Collaboration

Select Singers is open to students who seek many varied choral performance opportunities. This ensemble performs throughout the school district and community; and participates in New England show choir competitions under the name "Amped Up" during the winter season (January - March). Show choir performances include dancing: no prior dance experience is required, but a willingness to learn and perfect the choreography is required. Select Singers will meet during the school day, however after school rehearsals and performances are a required part of this class, including rehearsals with the Show Band on Thursday afternoons from 2:15-3:00pm during the months of December, January, February and March. Students in Select Singers are expected to participate in many performances in addition to the scheduled school concerts, including workshops and competitions that may carry financial obligations. It is important to note that there are processes in place for families who may be struggling financially; please see your School Counselor or Mrs. Pekar for more information. Members of the group perform extensively in the community during the month of December, with a strong emphasis on holiday carols. Please note that students who drop Select Singers after \(1^{\text {st }}\) Quarter will need to reimburse the school for the cost of their show choir costume.
Prerequisite: Past choral experience (middle or high school) and updated sports physical.
Performance Graduation Requirement: Collaboration

\section*{SYMPHONIC BAND** \(\quad\) Grades 9-12 \(\quad\) Year \(\quad 1\) credit}

This course includes rehearsal and performance of a variety of band literature. Music literature of differing styles and genres will be performed with attention given to musical understanding and interpretation as well as instrumental skills. Students are required to bring their instruments to class daily and to attend all rehearsals. Attendance at all major performances, including the Memorial Day Parade, is mandatory. This course may be repeated with consent of instructor. After school rehearsals and performances are a required part of this class.
Prerequisite: Ability to play a band instrument or \(8^{\text {th }}\) Grade Band or recommendation of the instructor
This ensemble offers a Level 1 option. Please see the description at the end of the ensemble listings.

\section*{Performance Graduation Requirement: Collaboration}

\section*{WIND ENSEMBLE**}

\section*{Grades 9-12}

Year
1 credit
Wind Ensemble is a select concert band for students who have demonstrated advanced proficiency in their ability to play an instrument. This course includes rehearsal and performance of a variety of band literature. Music literature of differing styles and genres will be performed requiring advanced instrumental skills, musical understanding and interpretation. Students are required to bring their instruments to class daily and to attend all rehearsals. Attendance at all major performances, including the Memorial Day Parade, is mandatory. Students in this ensemble are also expected to participate in many performances in addition to the scheduled school concerts, including workshops and competitions that may carry financial obligations. It is important to note that there are processes in place for families who may be struggling financially; please see your School Counselor or Mr. Wilson for more information After school rehearsals and performances are a required part of this class.
Prerequisite: Completion of previous year in Symphonic Band or by audition. Enrollment by audition and instructor permission. This ensemble offers a Level 1 option. Please see the description at the end of the ensemble listings.

\section*{Performance Graduation Requirement: Collaboration \\ HM}

\section*{JAZZ ENSEMBLE}

\section*{Grades 9-12}

\section*{By arrangement}

1 credit
Jazz Band is an ensemble that will explore a variety of jazz styles. It is open to all students enrolled in a large music ensemble. Students must perform at a moderately advanced level; students who wish to play an instrument other than what they play in class must audition for the instructor. Jazz Band meets outside the school day, as scheduled by the Director. Students are expected to attend all scheduled rehearsals and participate in all public performances.

Performance Graduation Requirement: Collaboration

Students can audition for this group at conductor invitation. Auditions are held in June. Rehearsals are held on Thursday afternoons from \(2: 15-3: 00 \mathrm{pm}\). The ensemble consists of one player per part, covering at minimum piano, keyboard, bass, guitar, and drums. Additional instruments will be added as required for the show choir repertoire. Emphasis is on musical independence, student leadership, and specialized performance practice. After school rehearsals and performances are a required part of this class. Students in this ensemble are expected to participate in many performances in addition to the scheduled school concerts, including workshops and competitions that may carry financial obligations. It is important to note that there are processes in place for families who may be struggling financially; please see your School Counselor or Mrs. Pekar for more information.
Prerequisite: Invitation from Instructor and Audition

\section*{The following ensembles offer a Level 1 option: Vocal: Concert Chorus, Tenor/Bass Chorus, Soprano/Alto Chorus Instrumental: Wind Ensemble, Symphonic Band}

LEVEL 1 ENSEMBLE REQUIREMENTS: Students electing to take a music ensemble for Level 1 credit must participate in any 3 of the following events:
- Open Enrollment: Eastern Region Auditions, New England Music Festival Auditions. You must earn a passing ( \(60 \%\) ) score or be selected for the subsequent Concert Festival to receive credit.
- Teacher Selected: Shoreline Music Festival, American Choral Directors Association Connecticut Honor Choir, American Band Directors Association Connecticut Honor Band
- Auditioned Festivals - Eastern Region, New England Music Festival, All State Festival

\section*{BASIC MUSICIANSHIP}

\section*{Grades 9-12}

Semester
\(1 / 2\) credit
This entry-level music course is designed for any student interested in becoming an independent musician. Students will explore the eight elements of music - rhythm, melody, harmony, dynamics, timbre, texture, form, and style-by playing African-style drums, guitar and keyboard. Professional guest musicians will share their expertise with the students as each instrument is introduced. Students who already have some background in one of these performance media are welcome to take the class; however, prior knowledge is not required. The culminating activity will be a performance which will be open to the public. NOTE: This course is BYOG - Bring Your Own Guitar (or, we can help you find one!).

Performance Graduation Requirement: Communication

\section*{MUSIC PRODUCTION}

Grades 10-12
Semester
\(1 / 2\) credit
Music Production is intended to give students a basic understanding of analog and digital recording. This course is an introductory, individual, project-based class using GarageBand and Logic computer software. Students will compose, record, and produce an original work in groups or as individuals.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Critical Thinking & HM & sTEM \\
\hline
\end{tabular}

\section*{MUSICAL PERFORMANCE \(\quad\) Grades 10-12 \(\quad\) Semester \(1 / 2\) credit}

Open to all students, regardless of previous experience, this course will explore the three aspects of musical performance: singing, acting, and dancing/movement. Each of these disciplines will be explored through the preparation and performance of scenes from popular musicals, with emphasis on the history of the American Musical Theater genre. All students in the class will perform solo, in duet scenes, and as a class. The final exam for this class is a public performance at the end of the semester. After school rehearsals and performances are required for this class, and carry class credit.

\section*{INTRO TO MUSIC APPRECIATION}

Grades 9-12
Semester \(\quad 1 / 2\) credit
This course introduces students to music analysis and the elements of music by studying Hamilton: The Musical. Study of this work will expose students to different genres and forms of music; provide a greater understanding of the historical importance of many prominent works; and develop a greater appreciation for how musical form is structured. This course is the prerequisite for ECE: Music Appreciation.
\begin{tabular}{|l|l|}
\hline Performance Graduation Requirement: Communication & HM \\
\hline
\end{tabular}

\section*{ECE: MUSIC APPRECIATION: MUSI 1001 \\ Grades 10-12 \\ Semester \\ \(1 / 2\) credit/ 3 UCONN credits}

This course focuses on the development of Western European music from the Middle Ages through the \(20^{\text {th }}\) Century. Students will engage in serious study of the elements of music and how music compositions have developed over the past 1400 years. Students will enroll as an UConn ECE student in Music 1001 and will receive 3 UCONN credits upon successful completion with a C or greater.
Prerequisite: Intro to Music Appreciation or permission of Instructor
```

Performance Graduation Requirement: Communication

```

HM

\section*{MUSIC THEORY I \\ Grades 10-12 \\ Semester \\ \(1 / 2\) credit}

Music Theory I is for any student who wishes to learn the fundamentals of music, including learning to read music. Fundamentals to be covered will include rhythm, note names and notation. Students may opt to enroll as a University of Connecticut student in Music 1011 and will receive 3 UCONN credits upon successful completion with a C or greater.

Performance Graduation Requirement: Communication
HM

ECE: FUNDAMENTALS OF MUSIC: MUSI 1011 Grades 10-12 Semester 1/2 credit/
3 UCONN credits
ECE Fundamentals of Music is for any student who wishes to learn the fundamentals of music, including learning to read music. Fundamentals to be covered will include rhythm, note names and notation. Students will enroll as a University of Connecticut student in Music 1011 and will receive 3 UCONN credits upon successful completion with a C or greater. This course may be scheduled either simultaneously with Music Theory I (listed above) OR, if the student wishes, they may be scheduled simultaneously with the first semester of AP Music Theory, with the intent to complete the year and take the AP exam in May as well.

\section*{Performance Graduation Requirement: Communication}

\section*{AP MUSIC THEORY}

Grades 11-12
Year
1 credit

This course is a year-long program in which students will learn about the characteristics of the major and minor keys, intervals, chords and their functions, as well as more advanced harmony, melody, ear-training, part-writing, harmonic analysis, and composing. Students are required to take the AP exam in May for AP credit on their transcripts. Techniques in AP test taking and scoring methods will also be included.
Prerequisite: Music Theory I or ECE: Fundamentals of Music with an average of 87 or higher and recommendation from instructor.

\title{
PHYSICAL EDUCATION / HEALTH
}

\section*{PHYSICAL EDUCATION AND WELLNESS}

Grades 9-10
Semester
\(1 / 4\) credit
This program is required for all students. The program is designed to develop physical skills and increase knowledge about a variety of sports. Activities vary from season to season with emphasis on team sports and fitness. Individual fitness lessons include the skills of goal setting and collaboration, as well as the benefits of physical activity as a stress reliever.

\section*{Performance Graduation Requirement: Collaboration}

\section*{HEALTH AND SAFETY EDUCATION}

Grade 9-10
Semester
\(1 / 4\) credit
Provided through Physical Education, this program is designed to develop the student's comprehension of their social, emotional and physical health. Through lectures, demonstration, audiovisuals and projects, students will develop a broad basis of knowledge which will enable them to make intelligent decisions concerning substance abuse, nutrition, stress, anxiety, depression, and sexual activity. Diversity, bullying and sexual harassment are also covered. Health Education is an approved and required curriculum taught to all students in Regional District \#18. In accordance with Public Act 88-112, instruction on Acquired Immune Deficiency Syndrome is included in the program. Parents/Guardians have the right to have their child exempt from that portion of health instruction dealing with AIDS. This must be done in written request submitted to the building principal.

\section*{Performance Graduation Requirement: Collaboration}

\section*{PHYSICAL EDUCATION}

\section*{Grades 11-12}

Semester \(\quad 1 / 2\) credit
This program is required for all students. The program is designed to develop skills and increase one's knowledge in a variety of individual and team sports. The activities vary from season to season with more emphasis placed upon individual fitness and lifelong fitness activities. The benefits of physical activity as a stress reliever and a healthy social activity is explored.

Performance Graduation Requirement: Collaboration
HEALTH \(\quad\) Grades 11-12 Semester \(1 / 4\) credit

Provided through Physical Education, this program continues to build upon the knowledge and skills taught in the \(9-10^{\text {th }}\) grade health course. Topics include: healthy relationships, sexual decision making, nutrition, substance abuse, and personal safety. Lessons may also include current health issues that may affect the students' well-being.

\section*{Performance Graduation Requirement: Collaboration}

\section*{ALTERNATE PHYSICAL EDUCATION Grades 11-12 Semester \(\quad\) 1/2 credit}

Alternate P.E. is an afterschool physical education program offered to juniors and seniors only. Students may take Alternate P.E. in place of P.E. offered during the regular school day. Lifetime P.E. activities include, but are not limited to: yoga; bowling; Zumba; ice skating; hiking and fishing. A different activity is offered each quarter. Students may enroll in one, or as many as, four activities. Alternate P.E. is on the same day of the week throughout the school year. Students must attend EVERY class in order to earn credit for the Alternate PE activity. Students register for this opportunity in the first week of school. Permission slips and instructor's approval are required to enroll in the Alternate P.E. Program.

Performance Graduation Requirement: Collaboration

\author{
Lyme-Old Lyme High School
}

\section*{SCIENCE}

SPECIAL NOTE: Juniors and seniors who have exhibited strength in their Math/Science courses and might be considering related post high school academic programs should consider taking courses from the following list:
\begin{tabular}{llll} 
AP Biology & AP Physics II & L2 Astronomy & L2 Marine Science \\
AP Chemistry & ECE Biology & L2 Environmental Science & \\
AP Computer Science & ECE Physics & L2 Forensic Science &
\end{tabular}

\section*{L2 BIOLOGY}

Grades 9-12
Year
1 credit
This level two course is designed to challenge students and encourage them to become independent thinkers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical thinking. It will cover the introductory topics in fast changing areas of the biological world in conjunction with the basic concepts of biology that align to Next Generation Science Standards Life Science performance expectations as well as Earth and Space Science standards that are related to biology. This course is taught at a college-preparatory level, with appropriate structure and support.
Prerequisite: Recommendation of eighth-grade teacher.
Performance Graduation Requirement: Critical Thinking
STEM


\section*{L1 BIOLOGY}

\section*{Grades 9-12}

Year
1 credit
This level one course is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical thinking. It will cover the introductory topics in fast changing areas of the biological world in conjunction with the basic concepts of biology that align to Next Generation Science Standards Life Science performance expectations as well as Earth and Space Science standards that are related to biology. The Level 1 course will include enrichment topics as well as more opportunity for independent work. Laboratory investigations will parallel the material under discussion throughout the course. This course is recommended for students who wish to pursue an accelerated science program in anticipation of post high school studies in the sciences. In this course students can anticipate that a great deal of responsibility is expected in preparation for classes.
Prerequisite: Recommendation of eighth-grade teacher.

\section*{Performance Graduation Requirement: Critical Thinking}

\section*{AP BIOLOGY \\ Grades 11-12 \\ Year \\ 1.5 credits}

This is a college level course in the principles and theories of Biology, including laboratory applications. The curriculum will follow that prescribed by the College Board Advanced Placement Exam. AP Biology students will automatically be enrolled in an additional laboratory period during the first semester. Students are required to take the AP exam in May for national AP credit on their transcripts. See AP program description for more details. Students have the option of combining a full year of AP Biology with the semester ECE course.
Prerequisite: 87 average in L1 Biology and L1 Chemistry and Department recommendation required for all AP courses.
Performance Graduation Requirement: Critical Thinking
STEM

This course is aligned with UCONN Introductory Biology course 1108. This course is embedded in AP Biology, with ECE BIO 1108 topics including plant biology, genetics, ecology, and evolution. Upon successful passing of the course with a grade of 73 or better, four UCONN credits will be conferred for the course. See UCONN ECE program description or go to https://ece.uconn.edu/biology/ for more details. On their transcript, students will receive a .5 credit in ECE: Biology and a .5 credit in Biology Lab.
Prerequisite: 87 average in L1 Biology and L1 Chemistry and Department recommendation

Performance Graduation Requirement: Critical Thinking
STEM


\section*{L2 CHEMISTRY}

Grades 10-12
Year
1 credit
This level two course is designed to challenge students and encourage them to become independent thinkers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical thinking. It will cover essential concepts in chemistry that are aligned to Next Generation Science Standards Physical Science performance expectations as well as Earth and Space Science standards that are related to chemistry. This course includes a strong emphasis on hands-on laboratory investigations. It is taught at a college-preparatory level, with appropriate structure and support.
Prerequisite: Successful completion of Biology
Performance Graduation Requirement: Critical Thinking
STEM

\section*{L1 CHEMISTRY}

\section*{Grades 10-12}

Year
1 credit
This level one course is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical thinking. It will cover the introductory topics in chemistry that are aligned to Next Generation Science Standards Physical Science performance expectations as well as Earth and Space Science standards that are related to chemistry. This course includes a strong emphasis on laboratory investigations that parallel the material under discussion throughout the course. Students can anticipate that a great deal of responsibility is expected in preparation for classes. Students having a high interest in science related careers and possessing strong math skills should consider this course.
Prerequisite: 83 average in L1 Algebra I and L1 Biology courses, or a 93 average or better in L2 Algebra I and L2 Biology and Department recommendation

Performance Graduation Requirement: Critical Thinking
STEM

\section*{AP CHEMISTRY}

Grades 11-12
Year
1.5 credits

This is a college level course in the principles and theories of Chemistry, including laboratory applications. The curriculum will follow that prescribed by the College Board Advanced Placement Exam. Students must take the AP Exam in May to obtain AP credit on their transcripts. AP Chemistry students will automatically be enrolled in an additional laboratory period during the first semester. See AP program description for more details.
Prerequisite: 87 average in L1 Chemistry, 85 average in L1 Algebra II and Department recommendation required for all AP courses.

\section*{L2 CONCEPTUAL PHYSICS}

Grades 10-11
Semester \(\quad 1 / 2\) credit

This one semester physics course is designed to support students in developing science skills in experimental design and laboratory investigations and application of physics concepts to meet NGSS Physical Science Expectations. Students will grapple with scientific phenomena as they engage in learning experiences that will provide them with practice in the inquiry skills necessary for success in future science courses. L2 Conceptual Physics will introduce students to key aspects of physics including motion, forces, work, power, machines, energy conversions, sound and light, among others. The course has an emphasis on hands-on performance tasks with real-world applications. To support concepts explored and assess learning, students will participate in lab experiments, performance-based assessments, scientific modeling, and exploration of scientific phenomenon.
Prerequisite: Successful completion of Biology or Chemistry
Performance Graduation Requirement: Critical Thinking
STEM

\section*{L2 PHYSICS}

\section*{Grades 11-12 Year}

1 credit
This level two course is designed to challenge students and encourage them to become independent thinkers. The pace of the course is appropriate for college-bound students; there is an emphasis on building skills in critical thinking. It will cover the introductory topics in Physics that are aligned to Next Generation Science Standards Physical Science performance expectations as well as Earth and Space Science standards that are related to physics. This Level 2 course uses a conceptual approach, rather than a mathematical approach and is taught at a college-preparatory level, with appropriate structure and support. It is designed to be accessible to students with a less rigorous math background. Students serious about a career in the physical sciences should examine whether they instead meet the prerequisites for the more appropriate L1/ECE/AP Physics classes.
Prerequisite: Successful completion of Biology or Chemistry
Performance Graduation Requirement: Critical Thinking
STEM

\section*{L1 PHYSICS}

\section*{Grades 10-12}

Year
1 credit
This level one course is designed to challenge highly motivated students who can consistently and independently meet course expectations. The pace of the course is rigorous as there is an emphasis on building skills in critical thinking. It will cover the introductory topics in Physics that are aligned to Next Generation Science Standards Physical Science performance expectations as well as Earth and Space Science standards that are related to physics. Students can anticipate that a great deal of responsibility is expected in preparation for classes. The Level 1 course is designed for students with a strong mathematics background. Students having a strong interest in science related careers should consider this course.
Prerequisite: 83 or above average in L1 Algebra I and L1 Algebra II (which may be taken concurrently with L1 Physics) and Department recommendation.

Performance Graduation Requirement: Critical Thinking
STEM

\section*{ECE: PHYSICS I Grades 10-12 Year 1 credit/4 UCONN credits}

This course is aligned with the UCONN course Physics 1201Q that covers mechanics, thermodynamics and wave mechanics. Upon successful passing of the course with a grade of 73 or better, four UCONN credits will be conferred. This course is embedded with Level 1 (Quantitative) Physics. See UCONN ECE program description for more details.
Prerequisite: 83 average in L1 Algebra I and L1 Algebra II (may be taken concurrently) and Department recommendation
Performance Graduation Requirement: Critical Thinking
STEM

\section*{AP PHYSICS II}

Grades 11-12 Year
1 credit
This is a college level course in the principles and theories of Physics in a non-calculus survey course. The curriculum will follow that prescribed by the College Board Advanced Placement Exam and will cover the introductory topics in electricity, magnetism, optics, wave mechanics and nuclear physics. Students can anticipate that a great deal of responsibility is expected in preparation for classes. Students are required to take the AP exam in May for national AP credit on their transcripts. See AP program description for more details. Students have the option of combining the AP/ECE Physics II course for the entire year. Prerequisite: 85 average in L1 Pre-Calculus and L1 Physics (or ECE Physics 1) and Department recommendation required for all AP courses.

\section*{Performance Graduation Requirement: Critical Thinking}

STEM

\section*{ECE: PHYSICS II}

\section*{Grades 11-12 Year 1 credit/4 UCONN credits}

This course is aligned with UCONN courses Physics 1202Q that covers electricity, magnetism, optics, wave mechanics and nuclear physics. Upon successful passing of the course with a grade of 73 or better, four UCONN credits will be conferred. The course is embedded within AP Physics II who will take their final in late May about two weeks after the AP exam. See UCONN ECE program description for more details. Students have the option of combining the AP/ECE Physics II course for the entire year.
Prerequisite: 85 average in L1 Pre-Calculus, have earned UCONN credit in ECE Physics I and Department recommendation.
\begin{tabular}{|l|l|l|l|}
\hline Performance Graduation Requirement: Critical Thinking & STEM & ense \\
\hline
\end{tabular}

\section*{L2 ASTRONOMY Grades 9-12 \(\quad\) Semester \(\boldsymbol{\&}\) Eves \(1 / 2\) credit}

This level two course will provide students with a basic theoretical background in astronomy and introduce students to the sky through elementary observing techniques. The class will include two evening viewing (observing) meetings per quarter (mandatory attendance). Topics of exploration will draw from intra-solar system and extra-solar system arenas.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Critical Thinking & sTEM & enew \\
\hline
\end{tabular}

\section*{L2 ENVIRONMENTAL SCIENCE Grades 10-12 Semester 1/2 credit}

This level two course will focus on local field studies and address global and regional environmental issues. Field studies to investigate local ecosystem diversity may include identification of local plant and animal species as well as data analysis of the field site. Research topics may include human impact on the environment, natural resource management, population growth, and sustainable development as well as student-generated concerns. This is a project-based course.
Prerequisite: Successful completion of Biology
Performance Graduation Requirement: Critical Thinking and Collaboration
STEM

\section*{L2 FORENSIC SCIENCE Grades 10-12 Semester 1/2 credit}

Forensic Science is an introductory course that focuses on practices and analysis of physical evidence found at crime scenes. Students will learn processes and principles of scientific inquiry and apply them to solve multidisciplinary problems. Critical thinking skills will be honed as well. The topics may include introduction to forensics and the law, evidence collection and crime scene analysis, fingerprint analysis, hair and fiber analysis, blood (typing and spatter patterns) analysis, and document and handwriting analysis.
Prerequisite: Successful completion of Biology and completion of or enrollment in Chemistry
Performance Graduation Requirement: Critical Thinking and Collaboration

Marine Science is the study of the sea and the organisms related to it. Physical/chemical topics include currents, the water cycle, oceanic geology, meteorology, tides, and seawater energy. Biological topics include a survey of marine life from algae to marine mammals. This is a project-based course.
Prerequisite: Successful completion of Biology
Performance Graduation Requirement: Critical Thinking and Collaboration
STEM

\section*{AP COMPUTER SCIENCE A Grades 11-12 Year 1 credit}

AP Computer Science A is an introductory college-level computer programming course that focuses on problem solving through the use of computer programming. The course follows the College Board's AP Computer Science curriculum, with a goal of preparing students for the AP Computer Science A exam. Students will understand and be able to use the concepts, techniques, and skills typically covered in a typical college-level introductory computer science course. Specifically, students will be able to analyze problems and design and implement software solutions to these problems using an object-oriented approach. Students will become sufficient in writing, executing, testing, and debugging programs in the Java programming language.
Prerequisite: Algebra II Level 2 with a final grade of A- or higher OR Algebra II Level 1 with a final grade of B-or higher. Prior programming experience is preferred but not required.

Performance Graduation Requirement: Critical Thinking and Collaboration

\section*{SOCIAL STUDIES}

\section*{NL CIVICS AND THE LAW*}

Grade 9
Semester
\(1 / 2\) credit
The Civics and the Law course is designed to prepare students to become responsible citizens through classroom debate, simulations, and exploration of the workings of our political and legal systems. The relationship of American politics and government to world affairs will be employed to bring students to an understanding of what is meant by the rule of law, as well as the imperative that citizens be engaged in the democratic process. A key objective of the course will be to show each young citizen the relevance between the structure, function, and process of government and their lives. *This course fulfills the state mandated Civics graduation requirement.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Collaboration & HM & w \\
\hline
\end{tabular}

\section*{NL ROOTS OF DEMOCRACY}

\section*{Grade 9}

Semester
\(1 / 2\) credit
Roots of Democracy is taken in grade 9, in addition to the Civics and the Law course. The Roots of Democracy course will focus on both skills and content. Students will explore the historic roots of democracy, the evolution of modern democracies, as well as make connections to current events. Additionally, the course will focus on developing students' historical thinking skills, such as contextualization, inquiry, and historical interpretation.
\begin{tabular}{|l||l|l|}
\hline Performance Graduation Requirement: Critical Thinking & HM & \\
\hline
\end{tabular}

\section*{NL MODERN WORLD HISTORY}

Grade 10
Year
1 credit
Modern World History focuses on the study of western and non-western civilizations from the 18th Century to present. Skill development includes critical thinking, problem solving, essay writing and analytical inquiry preparing students. This course presents a demanding workload. Students who successfully complete this course will gain a clearer understanding of the modern world, geography in history, global issues, and interrelationships.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & \\
\hline
\end{tabular}

\section*{AP EUROPEAN HISTORY}

\section*{Grade 10}

Year
1 credit
Advanced Placement European History is a comprehensive study of modern European history from 1500 to the present with a focus on developing students' historical thinking skills such as critical thinking, problem solving and analytical inquiry. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by introductory college courses. The course will also focus on analysis of primary and secondary sources. Students who successfully complete this course will gain a clearer understanding of the modern world, geography in history and global interrelationships. Students are required to complete prior summer work and take the AP exam in May for AP credit on their transcripts.
Prerequisite: None, however teacher recommendation is strongly encouraged.

Modern United States History is the in-depth study of America since 1877. The topics explored include Westward expansion, industrialization and reform, World War I, the Depression, World War II, the Cold War, the Civil Rights era and the Post-Cold War era to the present. Skills stressed include critical thinking, essay writing, effective oral communication, collaborative problem-solving, and analysis of cause and effect. Students will leave the course with a comprehensive understanding of US History and how modern America is shaped by its history. *Students will have the opportunity to contract for a L1 (Honors) designation. This involves take-home assignments and projects. The contract and the list of required assignments will be available to students in the spring preceding commencement of the course.


\section*{AP UNITED STATES HISTORY}

Grades 11-12
Year
1 credit
The AP program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by introductory college courses. Students should learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. An AP United States History student should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format. Students are required to take the AP exam in May for AP credit on their transcripts. There is a summer assignment and reading requirement.
Prerequisite: None, however teacher recommendation is strongly encouraged.


\section*{AP PSYCHOLOGY}

Grades 11-12
Year
1 credit

This course is designed to provide students with a deeper understanding of the theories and principles of the systematic and scientific study of behaviors and mental processes of humans. Throughout the readings, class work and discussions we will focus upon these essential questions: What is psychology? How do psychologists think? How is psychology applied and utilized in our everyday lives? Is psychology a valid way of understanding our behavior? Major topics include the history, methods and approaches of psychology; biological basis of behavior; sensation and perception; states of consciousness; learning; cognition; motivation and emotion; developmental psychology; theories of personality; psychological testing and individual differences; psychological disorders and their treatment; and social psychology. Students are required to take the AP exam in May for AP credit on their transcripts. There is a summer assignment and reading requirement.
Prerequisite: None, however teacher recommendation is strongly encouraged.
Performance Graduation Requirement: Communication
HM

\section*{L2 AMERICAN HISTORY THROUGH FILM Grades 11-12 Semester ½ credit}

This course examines American history through film, focusing on American culture and society. Students will critically analyze how American cultural and social history are portrayed in popular films. By watching, discussing, and writing about these films, students will examine how motion pictures create a window into modern American culture and society. We will learn how to read American films as cultural texts that help us better understand history and culture. Lastly students will be able to analyze films as both a product and producer of culture and historical memory. In this class, we will use various film specific supplemental readings which may include readings from Sam Wineburg's Historical Thinking, Joseph Roquemore's History goes to the Movies and Mark C. Carnes' Past Imperfect: History According to the Movies. Additionally, we will view significant American films about US history.

Performance Graduation Requirement: Critical Thinking

The first marking period of this course examines the basic concepts of psychology and human development from conception through young adulthood. Using the concepts of Piaget, Erickson, Freud, Skinner, Gardner and others, students will explore the physical, psychological, cognitive, emotional, and environmental aspects of human life. Guest speakers, workshops, audiovisuals and field trips may be used to reinforce learning. The second marking period of this course will engage students in the study of the self and the development of personality. Special attention is paid to the problems and concerns of adolescents and young adults through discussions and personal interactions.


\section*{L1 GLOBAL ISSUES}

\section*{Grades 11-12 Semester \(1 / 2\) credit}

This course focuses on a variety of important current issues that affect the modern world. The issues will be studied through a variety of student based research projects and collaborative work to help students develop their knowledge of important current issues. Students will work to become well-informed global citizens through actively engaging in issues that include world health problems, genocide, terrorism, international illegal trade, environmental issues and slavery in the modern world.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & w \\
\hline
\end{tabular}

\section*{L1 PRINCIPLES OF ECONOMICS Grade 12 Year 1 credit}

This course in Economics is designed to introduce students to the fundamental history, theory and real-world applications of economics. An in-depth study will be made of the factors which affect the economy and artificial stimuli employed to bolster economic trends. It includes a description and analysis of the major economic theories and institutions. Developing an understanding of these themes will help students make informed decisions and assess the decisions made by others. Microeconomic and Macroeconomic theories and applications will be the focus of Semesters 1 and 2, respectively. Throughout the course the twenty standards, as addressed in the Voluntary National Content Standards in Economics, will be incorporated to ensure solid coverage of the fundamentals.

\section*{SPECIAL EDUCATION}

The Special Education Department at LOLHS provides a variety of services to students with Individualized Education Programs (IEPs). Every student with an IEP has a case manager assigned to oversee and coordinate the implementation of the IEP.

\section*{NL MASTERY LAB}

Grades 9-12

This course is designed to provide direct special education services to eligible students. Individualized instruction in reading, writing, math and transition and life skills will be provided if called for in the IEP. Academic support of mainstream classes will include organizational, study and test-taking skills as outlined in the IEP. Placement in Mastery Lab and credits received for Mastery Lab are based on the IEP. Generally, .5 credits are awarded for a year-long class and .25 for a semester course.

\section*{ACADEMIC SUPPORTS}

\section*{NL THE ACADEMIC SUCCESS CENTER (TASC)}

TASC is a course for students needing to build organizational skills in a structured environment. A student must be recommended to TASC by their school counselor or parent. Each participant is assigned a tutor to whom they will report daily and with whom they will work to stay current with all daily and long term assignments. This is a Pass/Fail course. Upon successful completion of the course, a student will earn a quarter credit per year - up to half a credit will count toward the 23 credits required for graduation.

\section*{TECHNOLOGY AND ENGINEERING}

\author{
ENGINEERING DESIGN (CAD)
}

Grades 9-12
Year
1 credit

Engineering Design introduces the student to the universal language of technical drawing. Students will complete three dimensional models while studying the following topics: geometric construction, orthographic drawing, multi-view drawing and dimension techniques. Students will also study CNC machining. Parts designed on the computer using the Computer Aided Design system (CAD) software will be manufactured on the 3 -axis CNC mill or 3D printer. CNC mill projects will include parts for the electric vehicle, robot parts and individual student projects. This course is a good introduction to the engineering language of computer aided design. Students with a grade of C or better in the class, who are enrolled in the College Career Pathways program, may receive credit from Three Rivers Community College.

\section*{ADVANCED ENGINEERING DESIGN (CAD) Grades 10-12 Semester ½ credit}

This course is designed to expand on the technical skills developed in Engineering Design with a greater emphasis on CNC machining, 3D assemblies, animations and analysis. Students in this course will also assist with the design and manufacture of parts for the electric vehicle and robotics programs. Students seriously considering engineering should consider this course. This course may be taken multiple times to continue skill advancement.
Prerequisite: Engineering Design

\section*{INTRODUCTION TO ENGINEERING TECHNOLOGY \\ Grades 9-12 \\ Year \\ 1 credit}

This is an introductory course which offers students an opportunity to engage in hands-on design, construction and engineering activities. These activities teach both mechanical and engineering skills and the science behind the technology. Students design, build, and test through each of the units. We will study construction and CAD through the building of trebuchets, aerodynamic concepts through the building and testing of airplane wings, and engineering through the construction of underwater ROV robots. Students also engage in design-construction-evaluation activities which teach drafting, layout, CNC machining, construction and prototyping.

Performance Graduation Requirement: Creativity and Innovation
STEM

\section*{WOODWORKING TECHNOLOGY}

Grades 10-12
Year
1 credit
This course explores the woodworking process through hands-on learning. Students learn tool and machinery technique, and design and problem solving, as they build projects which start simple and progress. Students will learn all the steps in the carpentry process from planning and material characteristics to applying finish. Projects such as Adirondack chair construction utilize hand tools, power equipment and CNC software and machinery. Safety, accuracy and professionalism are emphasized in this lab-based course.

\section*{ADVANCED WOODWORKING TECHNOLOGY}

Grades 11-12
Sem. or Year
\(1 / 2\) or 1 credit
Students will build on their learning from the previous woodworking course. Focus will be on hands-on laboratory activities. Students learn tool and machinery technique as well as design and problem solving as they build. Students strengthen their skills as they explore the carpentry process from design to finishing. Safety, accuracy and professionalism are emphasized in this lab-based course. This course may be taken multiple times to continue skill advancement.
Prerequisite: Woodworking Technology
Performance Graduation Requirement: Creativity and Innovation

\section*{VIDEO PRODUCTION}

Semester
\(1 / 2\) credit
This course is designed to provide students with a background in videography and editing. Students will learn camera operation, digital editing, audio dubbing, composition and sequencing while working as part of a production team. The course follows a progression from basic camera skills to advanced editing processes. Course content is presented first through lecture, then demonstration, and finally student-produced projects. Projects will include stills to video, advertisements, public service announcements, news programs and television production.

Performance Graduation Requirement: Communication
STEM

\section*{ADVANCED VIDEO PRODUCTION \\ Grades 9-12 \\ Semester \\ \(1 / 2\) credit}

Advanced Video Production provides students with the opportunity to further their learning in digital videography and editing. The focus will be on television production for WLYM, the high school news station. Techniques in digital character generation, video mixing, advanced editing, and multi-camera production will be explored. Projects will include WLYM student news, school commercial productions, and public service announcements.
Prerequisite: Video Production
Performance Graduation Requirement: Communication
STEM

\section*{DIGITAL PHOTOGRAPHY \\ Grades 10-12 Semester \\ \(1 / 2\) credit}

This course is an introduction to creating, editing and printing digital images. Students will learn the basics of taking pictures with a digital single lens reflex camera. They will also learn to use Adobe Photoshop to edit images for print and the web. Topics include controlling depth of focus, controlling motion, ISO settings, lighting, file formats, image editing, and matting techniques. This course is recommended for students interested in photography and graphic arts.
\begin{tabular}{|l|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & SEM \\
\hline
\end{tabular}

\section*{ADVANCED TOPICS IN DIGITAL PHOTOGRAPHY Grades 11-12 Semester ½ credit}

This course is designed to expand on the technical and creative concepts acquired in digital photography. Topics of instruction include shooting in RAW format, advanced digital camera functions, exposure control, introduction to flash and studio lighting, lens types and filter use, and further understanding of image editing using Adobe Photoshop. This course is recommended for serious photography students who have a good understanding of basic camera functions and image editing. This course may be taken multiple times to continue skill advancement.
Prerequisite: Digital Photography
\begin{tabular}{|l|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & STEM \\
\hline
\end{tabular}

This course will introduce students to the technology of electric vehicles and the engineering process. Students will design, build and test a working electric vehicle for the National Electrathon Competition. Electricity, circuits, battery science, electric motors, welding, metal fabrication, steering systems and more will be studied and applied. Students will find answers to real design problems and apply mechanical skills as they create a working electric race vehicle.

\section*{Performance Graduation Requirement: Creativity and Innovation}

\section*{CNC TECHNOLOGY}

Grades 10-12
This course will introduce students to computer numerical controlled manufacturing. CNC machining is a manufacturing process in which pre-programmed computer software controls the movement of machines. CNC technology has become a necessary skill, for both post high school manufacturing jobs and community college or university technology and engineering programs. Possessing CNC skills opens up great job opportunities for students right out of high school and gives students a significant advantage in college technology and engineering programs. Students will set-up and run jobs on all CNC equipment including the Plasma cutter, Laser cutter, router, mill and lathe.

\section*{Performance Graduation Requirement: Creativity and Innovation}

\section*{TECHNOLOGY AND ENGINEERING ALTERNATE YEAR CLASSES}

\section*{ARCHITECTURAL DESIGN (CAD) \\ Grades 10-12 Semester \\ \(1 / 2\) credit}

Architectural Design provides an opportunity for problem solving and design as related to residential house planning through the Computer Aided Design system (CAD). The student will select a building lot locally and then prepare and produce a complete set of construction plans. Technical drawing skills previously obtained in Engineering Graphics are utilized to draw up preliminary house designs which are then finalized on the CAD system. Drawings include a plot plan, floor plan, elevations, electrical and plumbing plans and a door/window schedule. The majority of classroom time centers about the CAD system. Students interested in engineering should elect CAD and electronics courses.

\section*{Performance Graduation Requirement: Creativity and Innovation, Communication}

\section*{ALTERNATIVE ENERGY \\ Grades 10-12 \(\quad\) Semester \(1 / 2\) credit}

This course studies alternative energy and engineering through the design, construction, and testing of working alternative energy systems. Students build and test wind turbines, passive solar heaters, photovoltaic systems and energy storage devices. Students not only learn the science behind these systems but the mechanics as well. They use tools and equipment in their hands-on construction. From hand tools to 3D Design software and CNC machining, all are taught and employed in the creation of projects such as wind turbine blades and solar heaters. Offered in 2022-2023.

\section*{Performance Graduation Requirement: Creativity and Innovation}

STEM

\section*{ELECTRICAL ENERGY}

Grades 10-12
Semester
\(1 / 2\) credit
This course studies electricity through hands on wiring and building activities. Students learn how their homes are wired by constructing walls and electrical components which recreate a home's wiring system. They learn proper wiring techniques along with the science of electricity. Electricity is further explored through the construction of circuits which start simply and progress to the construction of a radio. Finally, we construct working electric motors as we study engineering and the science behind motor operation. Offered in 2022-2023.

Performance Graduation Requirement: Creativity and Innovation

\section*{MARINE TRANSPORTATION \\ Grades 10-12 \\ Semester \\ \(1 / 2\) credit}

This course studies marine transportation and engineering through hands-on activities. Students learn hydrodynamics and boat hull design by machining their own boat hull shapes and testing them in a tank. They engage in boat building through small wooden craft construction such as kayaks and prams. Students work collaboratively on wooden boat projects as they learn boat building technology and design. This course can also include propeller design, electronics, buoyancy, tool and equipment use and more.

\section*{ROBOTICS TECHNOLOGY}

Grades 10-12
Semester
\(1 / 2\) credit
Robotics Technology will be an opportunity to study the science and technology of robots through the design, construction, programming and testing and finally, evaluation of robotic projects. Robotics will be taught through a hands-on problemsolving based curriculum where students learn by building and programming robots in small groups. Offered in 2022-2023.
\begin{tabular}{|l||l|}
\hline Performance Graduation Requirement: Creativity and Innovation & STEM \\
\hline
\end{tabular}

\section*{SMALL GAS ENGINES \\ Grades 10-12 Semester \\ \(1 / 2\) credit}

This course studies mechanics and internal combustion engines. Students will be able to disassemble, inspect, diagnose and rebuild a small gas engine. Students will also learn engine maintenance and repair, diagnostics and machining. The course allows students to learn the proper use of mechanic's tools and equipment, along with safe working procedures. Offered in 2022-2023.

Performance Graduation Requirement: Creativity and Innovation.

\author{
Lyme-Old Lyme High School
}

\section*{WORLD LANGUAGES}

SPECIAL NOTE: Students entering Region 18 with prior language experience will be assessed in order to determine the appropriate course based on their proficiency level.

\section*{CHINESE}

Courses within the WL Department address the Advanced Placement themes in order to promote a better understanding of Standard Chinese and Chinese culture in society. All courses are designed to meet the interdisciplinary needs in the \(21^{\text {st }}\) Century. Students will explore the language through Interpersonal, Interpretive, and Presentational modes of communication in Mandarin Chinese. Emphasis will be on student growth measured on the American Council of Teachers of Foreign Language (ACTFL) proficiency levels.

\section*{L2 CHINESE LANGUAGE AND CULTURE I \\ Year \\ 1 credit}

This course is designed for a student who has no previous Mandarin Chinese language experience but has a desire to explore the language and culture at a beginning level. The focus of this class is to familiarize students with the language structures and sounds through the study of pinyin (western alphabet), as well as to explore, compare and contrast various cultural topics to include: geography and travel, customs and holidays, cuisine, educational systems, fine arts, and business.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & esm \\
\hline
\end{tabular}

\section*{L2 CHINESE LANGUAGE AND CULTURE II}

Year
1 credit
This class is a continuation of Chinese Language and Culture I. Students will begin a more aggressive study of the language structures and begin learning Chinese characters. Students will continue to develop all areas of communication skills as well as explore, contrast, and compare various cultural topics such as political, educational and economic systems, in contemporary Chinese society. This course will prepare students to continue their studies of Chinese language in Chinese III.
Prerequisite: 70 average in Chinese Language and Culture I and/or teacher recommendation based on student's application of the principles of growth mindset.


\section*{L1 CHINESE III}

\section*{Year}

1 credit
At this level, students will have mastered the basic grammar structures in Chinese and start to develop a much larger vocabulary, follow much more complex grammar rules and short discourse structures, as well as start a more vigorous study of Chinese characters. The students will continue to practice general conversations on familiar topics but also begin to develop presentational skills in Chinese. They will be able to analyze and synthesize information and present their opinions on different topics in Chinese. Students will explore the customs and norms, as well as some of the nuances of the language and culture. Prerequisite: 70 average in Chinese Language and Culture II and/or teacher recommendation based on student's application of the principles of growth mindset.

At this level, students will focus more on presentational skills in their communication and use complex and compound sentences to express ideas following an extended rhetorical structure in both oral and written presentations. Simple expressions at this level will be presented in Chinese characters. They will be able to consistently analyze and synthesize information and present their opinions on different topics in Chinese. Students will also come away with a much more in-depth understanding of the customs and norms, as well as some of the nuances of the language and culture. Chinese IV students are offered the opportunity to enroll concurrently in ECE Intermediate Chinese II (see separate listing for course description).
Prerequisite: 70 average in L1 Chinese III and/or teacher recommendation based on student's application of the principles of growth mindset.

Performance Graduation Requirement: Communication
HM

\section*{ECE: INTERMEDIATE CHINESE II}

\section*{Year}

1 credit/3 UCONN credits
This is an intermediate level Chinese language class that focuses on communication skills in listening, speaking, reading and writing in Mandarin Chinese. Students in this course will already have strong basic listening and speaking skills in Chinese, but need to continue improving skills in all linguistic areas, as well as learning about Chinese culture, and develop functional skills in Chinese language and culture.
Prerequisite: 70 average in L1 Chinese III and/or teacher recommendation based on student's application of the principles of growth mindset.

\section*{Performance Graduation Requirement: Communication}

\section*{L1 CHINESE V/AP CHINESE}

This course is recommended for juniors or seniors who would like to continue their studies in Chinese. Students further develop proficiency in all four areas and integrate the skills in listening, speaking, reading and writing using authentic materials and sources. This class will be conducted exclusively in Chinese and focus on the in-depth development of all skills through current events, cultural readings, short stories, articles, news broadcasts, movies, and radio broadcasts, as well as serious studies of Chinese four-character idioms. A special emphasis is placed on building students' abilities to comprehend a wide range of authentic listening and reading materials, and to express themselves idiomatically and appropriately in spoken and written tasks that are culturally specific. AP Chinese test materials will be thoroughly reviewed. This course is offered for AP credit with the required completion of the AP exam in May.
Prerequisite: 70 average in L1 Chinese IV and/or teacher recommendation based on student's application of the principles of growth mindset.

\title{
Lyme-Old Lyme High School
}

\section*{FRENCH}

Courses within the WL Department address the Advanced Placement themes in order to promote a better understanding of French language and francophone culture in society. All courses are designed to meet the interdisciplinary needs in the \(21^{\text {st }}\) Century. Students will explore the language through Interpersonal, Interpretive, and Presentational modes of communication in French. Emphasis will be on student growth measured on the American Council of Teachers of Foreign Language (ACTFL) French proficiency levels.

\section*{L2 FRENCH I}

\section*{Year}

1 credit
This is an introductory language course designed for students who are beginning the study of language as well as for students needing reinforcement of the middle school language curriculum before progressing to French II. Communicative proficiency will be emphasized through the development of interpretive, interpersonal and presentational communication skills. Students will explore and compare cultural products and practices of the francophone world while learning to use the language for a variety of communicative functions in alignment with the current ACTFL Can-Do Statements.


\section*{L2 FRENCH II}

\section*{Year}

1 credit
This course is a continuation of French I or Middle School French (grades 7 and 8). Communicative proficiency will continue to be emphasized through the development of interpretive, interpersonal and presentational communication skills in contexts prescribed by the six AP themes. Students will explore and compare cultural products and practices of the francophone world while learning to use the language for a variety of communicative functions in alignment with the current ACTFL Can-Do Statements at the level of Novice-Mid to Novice-High.
Prerequisite: 70 average in L2 French I and teacher recommendation based on the student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM \\
\hline
\end{tabular}

\section*{LI FRENCH III}

Year
1 credit
This course follows the completion of French II. Communicative proficiency will continue to be emphasized through the development of interpretive, interpersonal and presentational communication skills in contexts prescribed by the six AP themes. Students will explore and compare cultural products and practices of the francophone world while learning to use the language for a variety of communicative functions in alignment with the current ACTFL Can-Do Statements at the level of Novice-High to Intermediate-Low.
Prerequisite: 70 average in L2 French II and teacher recommendation based on the student's application of the principles of growth mindset.


\section*{L1 FRENCH IV}

\section*{Year}

1 credit
This course follows the completion of French III and is designed for students who would like to continue language study at a more advanced level. Communicative proficiency will continue to be emphasized, with a specific focus on presentational communication skills in contexts prescribed by the six AP themes. Students will explore and compare cultural products and practices of the francophone world while learning to use the language for a variety of communicative functions in alignment with the current ACTFL Can-Do Statements at the level of Intermediate-Low to Intermediate-Mid. French IV students are offered the opportunity to enroll concurrently in ECE French 3268 (see separate listing for course description).
Prerequisite: 70 average in L1 French III and teacher recommendation based on the student's application of the principles of growth mindset.


HM

\section*{ECE FRENCH GRAMMAR \& COMPOSITION}

Year
1 credit/3 UCONN credits

This is a composition course, as well as a review of grammar. In this course, students will learn specific writing skills, such as taking notes, writing an email, writing a letter, a narrative, a portrait, a film or book review, an argumentative essay, a research paper, etc. Students will work on improving their writing skills while reading different types of texts (letters, poetry, short stories, a novel, newspaper articles, film reviews, and portraits) and studying their functions and techniques. The course addresses a wide variety of topics related to the French-speaking world. A special emphasis is placed on building students' ability to understand, articulate, and synthesize a wide range of information in their writing. Students enroll as a University of Connecticut student in French 3268 and will receive 3 UCONN credits upon successful completion with a 70 or greater. This course is taught concurrently with L1 French IV.
Prerequisite: 70 average in Level 1 French III, and/or teacher recommendation based on student's application of the principles of growth mindset.

\section*{Performance Graduation Requirement: Communication}

\section*{HM}

\section*{L1 FRENCH V/AP}

Year
1 credit
This course is recommended for students who have successfully completed L1 French IV and would like to continue the study of French at an advanced level. Students will further develop proficiency in the three modes of communication (interpersonal, interpretive and presentational) using authentic sources, including news articles, literary readings, films, videos, radio broadcasts and podcasts. The class is conducted entirely in French and focuses on the in-depth development of skills at the ACTFL proficiency level of Intermediate-Mid to Intermediate-High. Course content is structured around six main themes: Contemporary Life, Family and Community, Global Challenges, Public and Personal Identities, Aesthetics and Science and Technology. A special emphasis is placed on building students' abilities to understand, articulate and synthesize a wide range of information in their speaking and writing. Students may opt to enroll concurrently in ECE French 3250 (see separate listing for course description below). Completion of the AP exam in May is required to receive AP credit for the course.
Prerequisite: 70 average in L1 French IV/ECE French Grammar and Composition and teacher recommendation based on the student's application of the principles of growth mindset.

\section*{Performance Graduation Requirement: Communication}

\section*{ECE: FRENCH GLOBAL CULTURE I}

Year
1 credit/3 UCONN credits
This course is intended for students who have completed French IV and/or ECE French Grammar and Composition. It provides students with an opportunity for rigorous and active oral practice through dialogues, interviews, round table discussions and oral presentations. Using a variety of authentic French materials (including newspaper and magazine articles, short stories, videos, short and feature-length films, etc.) as a jumping-off point, students will demonstrate the ability to comprehend and communicate in French with accuracy and fluency on a variety of topics. Additionally, students will show an appreciation of cultural perspectives of various French-speaking peoples. Students enroll as a University of Connecticut student in French 3250 and will receive 3 UCONN credits upon successful completion with a 70 or greater. This course runs concurrently with AP French.
Prerequisite: 70 average in Level 1 French IV or ECE French Grammar and Composition, and/or teacher recommendation based on student's application of the principles of growth mindset.

Performance Graduation Requirement: Communication

\section*{Lyme-Old Lyme High School}

\section*{LATIN}

Courses within the WL Department address the Advanced Placement themes in order to promote a better understanding of Classical language and Roman culture in society. All courses are designed to meet the interdisciplinary needs in the \(21^{\text {st }}\) Century. Students will explore the language through Interpersonal, Interpretive, and Presentational modes of communication in Latin. Emphasis will be on student growth measured on the American Council of Teachers of Foreign Language (ACTFL) proficiency levels.

\section*{L2 LATIN I \\ Year \\ 1 credit}

This course serves as an introduction to the Latin language and Greek and Roman culture with a focus on daily life as a Roman. Students will make connections to the English language and gain insight about Western culture as they explore, compare and contrast social and cultural concepts, practices and products. The ultimate goal of studying Latin is to read this 2000+ year old language, still used today, as well as to acquire linguistic competency in general. To this end, communicative proficiency will be emphasized. Through the development of listening/speaking, and reading/writing skills, students will use stories and storytelling to acquire knowledge of grammar, culture, and vocabulary of the Latin language, and Greek and Roman culture.


\section*{L2 LATIN II}

\section*{Year}

1 credit
This course is a continuation of Latin I, focusing on the multi-cultural makeup of the Roman Empire. Students will continue to explore, compare and contrast social and cultural concepts, practices and products in the pursuit of acquiring knowledge of grammar, culture, and vocabulary of the Latin language, and Greek and Roman culture.
Prerequisite: 70 average in L2 Latin I and/or teacher recommendation based on student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & wor \\
\hline
\end{tabular}

\section*{L1 LATIN III}

Year
1 credit
This course is designed for those who want to continue to study language at a more intensive level. Increased emphasis will be placed on refining structural patterns as well as improving and increasing oral and written proficiency in the pursuit of acquiring knowledge of the Latin language and Greek and Roman culture.
Prerequisite: 70 average in L2 Latin II and/or teacher recommendation based on student's application of the principles of growth mindset.


\section*{L1 LATIN IV}

Year
1 credit
The emphasis at this level of language learning is on intensive oral and written communication as well as review of all structures. Students will explore adapted readings from ancient Roman, medieval and modern Latin authors, at a more advanced level. Latin IV students are offered the opportunity to enroll concurrently in ECE Topics in Advanced Latin (see separate listing for course description).
Prerequisite: 70 average in L1 Latin III and/or teacher recommendation based on student's application of the principles of growth mindset.


ECE Latin is an extension of the Latin IV curriculum. Students will read the same authors and texts as the Latin IV class, but will be held to higher expectations of engagement in communication and interpretation. Assessments and in-class assignments will provide further opportunity for in-depth analysis of text, and creation of authentic language. ECE Latin correlates with UCONN Early College Experience.
Prerequisite: 70 average in L1 Latin III and/or teacher recommendation based on student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & w \\
\hline
\end{tabular}

\section*{SPANISH}

Courses within the WL Department address the Advanced Placement themes in order to promote a better understanding of Spanish language and Hispanic/Latin culture in society and the growing influence of Spanish in the U.S. All courses are designed to meet the interdisciplinary needs in the \(21^{\text {st }}\) Century. Students will explore the language through Interpersonal, Interpretive, and Presentational modes of communication in Spanish. Emphasis will be on student growth measured on the American Council of Teachers of Foreign Language (ACTFL) proficiency levels.

\section*{L2 SPANISH II}

\section*{Year}

1 credit

This course is designed for those students who have successfully completed Spanish I at the Middle School. Students will review and reinforce grammatical structures while continuing to develop language skills (listening, speaking, reading and writing). Students will continue to explore, compare and contrast regional, social and cultural concepts, practices and products. Prerequisite: 70 average in L2 Spanish I and/or teacher recommendation based on student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & wor \\
\hline
\end{tabular}

\section*{L1 SPANISH III}

Year
1 credit
This course is designed for those students who have successfully completed Spanish II in Middle School or High School. Students will continue to study language at a more intensive level. The course is composed of the six units derived from the six Global AP themes and contexts. All unit materials are made up of engaging authentic resources. Students are exposed to the 3 modes of communication: Presentational, Interpretive, \& Interpersonal. Emphasis in Spanish III will be on interpersonal writing (usually in response to a current reading) \& speaking (usually in response to an authentic conversation) at the ACTFL proficiency level of Novice-High - Intermediate Low. Grammar \& vocabulary are embedded in challenging cultural scenarios throughout each unit.
Prerequisite: 70 average in L2 Spanish II and teacher recommendation based on student's application of the principles of growth mindset.

This course is designed for those students who have successfully completed Spanish III. Students will continue to study language at a more intensive level. The course is composed of the six units derived from the six Global AP themes and contexts. All unit materials are made up of current and engaging authentic resources. Students are exposed to the 3 modes of communication: Presentational, Interpretive, \& Interpersonal. Emphasis in Spanish IV will be on presentational writing \& speaking to formal, informal, and professional audiences as well as reinforcing interpersonal writing \& speaking at the ACTFL proficiency level of Intermediate Low - Intermediate-Mid. Grammar \& vocabulary are embedded in challenging cultural scenarios throughout each unit.
Prerequisite: 70 average or higher in L1 Spanish III and teacher recommendation based on student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & w \\
\hline
\end{tabular}

\section*{ECE: SPANISH CONVERSATION \& CULTURAL TOPICS Year 1 Credit / 3 UCONN credits}

This course is recommended for juniors or seniors who have completed Spanish IV and would like to continue their studies in Spanish. This course will investigate a wide variety of cultural themes concerning the Spanish-speaking world through the study of film. Students will investigate the background of these films and how they reflect the perspectives of the respective countries. Furthermore, students will explore current events, news and radio broadcasts. Students develop proficiency and integrate the skills of speaking, listening, reading and writing using authentic materials and sources. A special emphasis is placed on building a student's ability to understand and synthesize a wide range of information, and articulate it orally through various types of presentations. Students enroll as a University of Connecticut student in Spanish 3179 and will receive 3 UCONN credits upon successful completion with a 70 or greater. In April students take the qualifying exam for the Connecticut Seal of Biliteracy.
Prerequisite: 70 average in L1 Spanish IV and /or teacher recommendation based on student's application of the principles of growth mindset.

Performance Graduation Requirement: Communication

\section*{AP SPANISH LANGUAGE \& CULTURE / ECE: SPANISH INTERMEDIATE COMPOSITION}

Year

This course is recommended for seniors who would like to continue their studies in Spanish after completing ECE Cultural Topics. Students further develop proficiency and integrate the skills of speaking, listening, reading and writing using authentic materials and sources. The class is conducted entirely in Spanish and focuses on the in-depth development of all skills through current events, cultural readings, short stories, articles, news broadcasts, movies, movie shorts and radio broadcasts. Course content is structured around six main themes: Contemporary Life, Family and Community, Global Challenges, Public and Personal Identities, Aesthetics and Science and Technology. A special emphasis is placed on building students' abilities to understand, articulate and synthesize a wide range of information in their speaking and writing. Students may opt to enroll as a University of Connecticut student in Spanish 3178, and will receive 3 UCONN credits upon successful completion with a 70 or greater. Completion of the AP exam in May is required to receive AP credit for the course.
Prerequisite: 70 average in ECE Spanish Conversation \& Culture and /or teacher recommendation based on student's application of the principles of growth mindset.
\begin{tabular}{|l|l|l|}
\hline Performance Graduation Requirement: Communication & HM & w \\
\hline
\end{tabular}

\section*{EXAMPLES OF 4-YEAR PLANS}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{EXAMPLE A} & \multicolumn{2}{|l|}{EXAMPLE B} & \multicolumn{2}{|l|}{EXAMPLE C} \\
\hline \(9^{\text {TH }}\) GRADE & & \(9^{\text {TH }}\) GRADE & & \(9^{\text {TH }}\) GRADE & \\
\hline L2 English 9 & 1.0 & L2 or L1 English 9 & 1.0 & L1 English 9 & 1.0 \\
\hline L2 Biology & 1.0 & L2 or L1 Biology & 1.0 & L1 Biology & 1.0 \\
\hline L2 Alg 1 or L2 Alg I w/ Lab & 1-1.5 & L2 or L1 Algebral & 1.0 & L1 Geometry & 1.0 \\
\hline Civics/Roots of Democracy & 1.0 & Civics/Roots of Democracy & 1.0 & Civics/Roots of Democracy & 1.0 \\
\hline PE & . 25 & World Language I or II & 1.0 & Language II (L2) or III (L1) & 1.0 \\
\hline Health & . 25 & PE & . 25 & PE & . 25 \\
\hline Electives & 2.0+ & Health & . 25 & Health & 25 \\
\hline \multirow[t]{2}{*}{TOTAL} & 6.5-8 & Electives & \(5+\) & Electives & \(1.5+\) \\
\hline & & TOTAL & 6.5-8 & TOTAL & 7-8 \\
\hline \multicolumn{2}{|l|}{\(10^{\text {th }}\)} & \multicolumn{2}{|l|}{\(10^{\text {th }}\)} & \multicolumn{2}{|l|}{10th} \\
\hline L2 English 10 & 1.0 & L2 or L1 English 10 & 1.0 & L1 English 10 & 1.0 \\
\hline L2 Chemistry & 1.0 & L1 or L2 Chemistry & 1.0 & L1 Chemistry & 1.0 \\
\hline L2 Geometry or L2 Geom with lab & 1-1.5 & L2 or L1 Geometry & 1.0 & L1 Algebra II & 1.0 \\
\hline Modern World History & 1.0 & Modern World History & 1.0 & AP European History & 1.0 \\
\hline PE & . 25 & W. Language II (L2) or III (L1) & 1.0 & L1 World Language III or IV & 1.0 \\
\hline Health & . 25 & PE & . 25 & PE & 25 \\
\hline Electives & \(2+\) & Health & . 25 & Health & 25 \\
\hline \multirow[t]{2}{*}{TOTAL} & 6.5-8 & Electives & 1+ & Electives & \(1.5+\) \\
\hline & & TOTAL & 6.5-8 & TOTAL & 7-8 \\
\hline \multicolumn{2}{|l|}{\(11^{\text {th }}\)} & \multicolumn{2}{|l|}{\(11^{\text {th }}\)} & \multicolumn{2}{|l|}{11th} \\
\hline L2 English 11 & 1.0 & L2 or L1 English 11 & 1.0 & L1 English 11 & 1.0 \\
\hline L2 Physics & 1.0 & L2 or L1 Physics & 1.0 & L1 Physics or ECE/AP Sciences & 1-1.5 \\
\hline L2 Algebra II or App. Algebra II & 1.0 & L2 or L1 Algebra II & 1.0 & L1 Pre-Calculus & 1.0 \\
\hline Modern US History & 1.0 & L1 or Modern US History & 1.0 & AP US History & 1.0 \\
\hline PE & . 50 & PE & . 5 & L1 World Lang. IV or ECE & 1.0 \\
\hline Electives & 2+ & Electives & \(2+\) & PE & . 5 \\
\hline \multirow[t]{2}{*}{TOTAL} & 6.5-8 & TOTAL & 6.5-8 & Electives & 1.5+ \\
\hline & & & & TOTAL & 7-8 \\
\hline \multicolumn{2}{|l|}{\(12^{\text {th }}\)} & \multicolumn{2}{|l|}{\(12^{\text {th }}\)} & \multicolumn{2}{|l|}{12th} \\
\hline L2 English 12 & 1.0 & L1 English 12/ECE Wrtg Sem & 1.0 & AP English & 1.0 \\
\hline Academic Electives & .5-1.0 & Science electives & .5-1 & AP/ECE Sciences & 1-1.5 \\
\hline PE & . 5 & L2 Pre-Calculus/ L2 or AP & 1.0 & L1 or AP Calc \&/or AP & 1-2.0 \\
\hline Electives & 4.5+ & Statistics & & Statistics & \\
\hline \multirow[t]{5}{*}{TOTAL} & 6.5-8 & Social Studies electives & .5-1 & L1 Economics or AP Psych & 1.0 \\
\hline & & PE & . 5 & World Language ECE or AP & 1.0 \\
\hline & & Electives & \(3+\) & PE & . 5 \\
\hline & & \multirow[t]{2}{*}{TOTAL} & 6.5-8 & Electives & 1.5+ \\
\hline & & & & TOTAL & 7-8 \\
\hline
\end{tabular}

These examples from A to C reflect examples of increasing rigor. The more competitive a college is, the more likely they recommend/require continuation for four credits in core academic areas, experience with lab sciences, 2-4 years of a world language, and maintaining a challenging schedule. These examples are meant as guidelines; each college will have individual preferences and requirements. Electives are available in several departments such as music, technology, business/computers, and art as well as in core academic areas of English, Science and Social Studies.

Class of 2022 FOUR YEAR PLANNING SHEET-for your use
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ 9 \(^{\text {TH }}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ 11 \(^{\text {TH }}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}

I will have taken:
4 English credits
3 Math credits
3 Science credits
3 Social Studies (including 1 USH \& . 5 Civics)
2 PE credits
My additional personal goals: \(\qquad\)
1 Art or Vocational credit
7 other credits
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{\(\mathbf{1 0}^{\mathbf{T H}}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ 12 \(^{\text {TH }}\) GRADE } \\
\hline Course Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}

To strengthen my transcript, I am considering:
World Language 2-4 credits
AP classes
Prerequisites for advanced classes
\(\qquad\)

Class of 2023 \& Beyond FOUR YEAR PLANNING SHEET-for your use
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{\(9^{\text {TH }}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ 11 \({ }^{\text {TH }}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}

I will have taken:
4 English credits
3 Social Studies credits (including 1 USH \& . 5 Civics)
1 Fine Arts credit
1 Humanities Elective cr. __ 1 PE credit
3 Math credits
1 Health credit
3 Science credits
3 STEM Elective credits 1 World Language credit

1 Performance
Based Assessment 3 Elective credits
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{ 10 \(^{\text {TH }}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline \multicolumn{2}{|c|}{\(\mathbf{1 2}^{\mathbf{T H}}\) GRADE } \\
\hline Course & Credit \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline Total Credits: & \\
\hline
\end{tabular}

To strengthen my transcript, I am considering: World Language 2-4 credits
AP classes
Prerequisites for advanced classes
My additional personal goals: \(\qquad\)

\author{
Lyme-Old Lyme High School
}

\section*{INDEX OF COURSES}

\section*{ART}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline Advanced Ceramic Arts & .5 & \(10-12\) & 20 \\
\hline Advanced Digital Media: Animation \& Game Design & .5 & \(10-12\) & 19 \\
\hline Advanced Digital Media: Graphic Design & .5 & \(10-12\) & 19 \\
\hline Advanced Drawing & .5 & \(9-12\) & 20 \\
\hline Advanced Painting & .5 & \(9-12\) & 21 \\
\hline AP Studio Art & 1 & \(11-12\) & 21 \\
\hline Ceramic Arts & .5 & \(9-12\) & 20 \\
\hline ECE: Drawing & 1 & \(10-12\) & 21 \\
\hline Introduction to Ceramic Arts \& 3D Design & .5 & \(9-12\) & 21 \\
\hline Introduction to Digital Media & 1 & \(9-12\) & 19 \\
\hline Introduction to Drawing & .5 & \(9-12\) & 20 \\
\hline Introduction to Painting & .5 & \(9-12\) & 20 \\
\hline L1 Portfolio Development & \(.5-1.0\) & \(11-12\) & 21 \\
\hline
\end{tabular}

\section*{COMPUTER AND BUSINESS/MANAGEMENT SCIENCES}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline Accounting & 1 & \(9-12\) & 22 \\
\hline Accounting Applications & \(.5-1\) & \(11-12\) & 23 \\
\hline Advanced Accounting & 1 & \(10-12\) & 23 \\
\hline Computer Program Design & .5 & \(9-12\) & 24 \\
\hline AP Computer Science A & 1.0 & \(11-12\) & 25 \\
\hline Cyber Security Fundamentals & .5 & \(11-12\) & 24 \\
\hline Entrepreneurship & .5 & \(9-12\) & 24 \\
\hline International Business & .5 & \(9-12\) & 25 \\
\hline Introduction to Accounting & .5 & \(9-12\) & 22 \\
\hline Investments & .5 & \(9-12\) & 23 \\
\hline Java Programming & .5 & \(9-12\) & 24 \\
\hline LOLHS Store & .25 & \(9-12\) & 24 \\
\hline Management & .5 & \(9-12\) & 24 \\
\hline Marketing & .5 & \(9-12\) & 23 \\
\hline Microsoft Office Certification & .5 & \(9-12\) & 25 \\
\hline Personal \& Consumer Law & .5 & \(9-12\) & 25 \\
\hline Personal Finance & .5 & \(9-12\) & 23 \\
\hline Social Media/E-Commerce & .5 & \(9-12\) & 23 \\
\hline Web Design & .5 & \(9-12\) & 24 \\
\hline
\end{tabular}

\section*{ENGLISH}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline AP English Literature and Composition & 1 & 12 & 29 \\
\hline ECE: Seminar in Writing Through Literature & 1 & 12 & 28 \\
\hline Level 1 English 12 & 1 & 12 & 28 \\
\hline Level 2 English 12 & 1 & 12 & 27 \\
\hline Level 1 English 11 & 1 & 11 & 27 \\
\hline Level 2 English 11 & 1 & 11 & 27 \\
\hline Level 1 English 10 & 1 & 10 & 27 \\
\hline Level 2 English 10 & 1 & 10 & 26 \\
\hline Level 1 English 9 & 1 & 9 & 26 \\
\hline Level 2 English 9 & 1 & 9 & 26 \\
\hline Level 2 Creative Writing I & .5 & \(9-12\) & 29 \\
\hline Level 2 Creative Writing II & .5 & \(10-12\) & 29 \\
\hline Level 1 Humanities & .5 & \(11-12\) & 30 \\
\hline Level 2 Media Literacy & .5 & \(9-12\) & 29 \\
\hline Level 2 Writing and Communication/Real World & .5 & 12 & 30 \\
\hline
\end{tabular}

HIGH SCHOOL CAREER PATHWAYS
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & \begin{tabular}{l} 
Open to \\
Grades
\end{tabular} & Page \# \\
\hline Career Exploration - Job Shadows & .25 & \(11-12\) & 13 \\
\hline Career Exploration - Field Experience & .5 & \(11-12\) & 13 \\
\hline Cooperative Work Experience/Diverse Occupations (CWEDO) & 1.0 & \(11-12\) & 13 \\
\hline High School 101 & .5 & 9 & 22 \\
\hline Unpaid Experiential Learning Program (UELP) & NC & \(11-12\) & 13 \\
\hline
\end{tabular}

MATHEMATICS
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline AP Calculus (AB) & 1 & \(11-12 ;\) see prerq. & 33 \\
\hline AP Statistics & 1 & \(11-12 ;\) see preqq. & 34 \\
\hline Level 1 Algebra I & 1 & see prerequisites & 31 \\
\hline Level 2 Algebra I & 1 & see prerequisites & 31 \\
\hline Level 2 Algebra I Lab & .5 & see prerequisites & 31 \\
\hline Level 1 Algebra II & 1 & see prerequisites & 32 \\
\hline Level 2 Algebra II & 1 & see prerequisites & 32 \\
\hline Applied Algebra II & 1 & see prerequisites & 32 \\
\hline Level 1 Geometry & 1 & see prerequisites & 32 \\
\hline Level 2 Geometry & 1 & see prerequisites & 31 \\
\hline Level 2 Geometry Lab & .5 & see prerequisites & 32 \\
\hline Level 1 Calculus & 1 & see prerequisites & 33 \\
\hline Level 1 Pre-Calculus & 1 & see prerequisites & 33 \\
\hline Level 2 Pre-Calculus & 1 & see prerequisites & 33 \\
\hline Level 2 Statistics & 1 & \(11-12 ;\) see prerq. & 33 \\
\hline
\end{tabular}

\section*{MUSIC}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline AP Music Theory & 1 & \(11-12\) & 38 \\
\hline Basic Musicianship & .5 & \(9-12\) & 37 \\
\hline Concert Chorus & 1 & \(11-12\) & 35 \\
\hline Music Theory I & .5 & \(10-12\) & 38 \\
\hline ECE Fundamentals of Music: MUSI 1011 & .5 & \(10-12\) & 38 \\
\hline ECE Music Appreciation: MUSI 1001 & .5 & \(10-12\) & 38 \\
\hline Introduction to Music Appreciation & .5 & \(9-12\) & 38 \\
\hline Jazz Ensemble** & 1.0 & \(9-12\) & 36 \\
\hline Musical Performance & .5 & \(10-12\) & 37 \\
\hline Music Production & .5 & \(10-12\) & 37 \\
\hline Show Band** & .5 & \(9-12\) & 37 \\
\hline Select Singers & 1.0 & \(9-12\) & 36 \\
\hline Soprano/Alto Chorus & 1 & \(9-10\) & 35 \\
\hline Symphonic Band & 1 & \(9-12\) & 36 \\
\hline Tenor/Bass Chorus & 1 & \(9-10\) & 35 \\
\hline Wind Ensemble & 1 & \(9-12\) & 36 \\
\hline
\end{tabular}
** These courses may meet before/after school or by arrangement, and do not count towards needed annual 6.5 credit course load.

\section*{OTHER}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline The Academic Success Center & .25 & \(9-12\) & 48 \\
\hline Independent Study Program & .5 or 1 & \(9-12\) & 11 \\
\hline Virtual Learning (previously known as VHS) & .5 or 1 & \(9-12\) & 12 \\
\hline
\end{tabular}

\section*{PHYSICAL EDUCATION}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline Physical Education \& Wellness 9-10 & .25 & \(9-10\) & 39 \\
\hline Health and Safety Education 9-10 & .25 & \(9-10\) & 39 \\
\hline Health and Safety Education 11-12 & .25 & \(11-12\) & 39 \\
\hline Physical Education \& Wellness 11-12 & .50 & \(11-12\) & 39 \\
\hline Alternative Physical Education & .50 & \(11-12\) & 39 \\
\hline
\end{tabular}

SCIENCE
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline AP Biology and Lab & 1.5 & \(11-12\) & 40 \\
\hline AP Chemistry and Lab & 1.5 & \(11-12\) & 41 \\
\hline AP Computer Science A & 1.0 & \(11-12\) & 45 \\
\hline AP Physics II & 1 & \(11-12\) & 43 \\
\hline ECE: Biology I and Lab & 1 & \(11-12\) & 41 \\
\hline ECE: Physics I & 1 & \(10-12\) & 42 \\
\hline ECE: Physics II & 1 & \(11-12\) & 43 \\
\hline Level 1 Biology & 1 & \(9-12\) & 40 \\
\hline Level 2 Biology & 1 & \(9-12\) & 40 \\
\hline Level 1 Chemistry & 1 & \(10-12\) & 41 \\
\hline Level 2 Chemistry & 1 & \(10-12\) & 41 \\
\hline Level 2 Environmental Science & .5 & \(10-12\) & 43 \\
\hline Level 2 Forensic Science & .5 & \(10-12\) & 43 \\
\hline Level 2 Astronomy & .5 & \(9-12\) & 43 \\
\hline Level 2 Marine Science & .5 & \(10-12\) & 44 \\
\hline Level 1 Physics & 1 & \(10-12\) & 42 \\
\hline Level 2 Conceptual Physics & .5 & \(10-22\) & 42 \\
\hline Level 2 Physics & 1 & \(11-12\) & 42 \\
\hline
\end{tabular}

\section*{SOCIAL STUDIES}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline AP European History & 1 & 10 & 45 \\
\hline AP Psychology & 1 & \(11-12\) & 46 \\
\hline AP United States History & 1 & 11 & 46 \\
\hline Level 1 Global Issues & .5 & \(11-12\) & 47 \\
\hline Level 1 Principles of Economics & 1 & 12 & 47 \\
\hline Level 2 American History through Film & .5 & \(11-12\) & 46 \\
\hline Level 2 Introduction to Psychology & .5 & \(11-12\) & 47 \\
\hline *Modern United States History & 1 & 11 & 46 \\
\hline NL Modern World History & 1 & 10 & 45 \\
\hline NL Civics and the Law & .5 & 9 & 45 \\
\hline NL Roots of Democracy & .5 & 9 & 45 \\
\hline
\end{tabular}
*Levels 1 and 2 taught in heterogeneous groupings

\section*{SPECIAL EDUCATION}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline NL Mastery Lab & \(.25-.5\) & \(9-12\) & 48 \\
\hline
\end{tabular}

\section*{TECHNOLOGY AND ENGINEERING}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline Advanced Engineering Design (CAD) & .5 & \(10-12\) & 49 \\
\hline Advanced Topics in Digital Photography & .5 & \(11-12\) & 50 \\
\hline Advanced Video Production & .5 & \(9-12\) & 50 \\
\hline Advanced Woodworking Technology & .5 & \(11-12\) & 50 \\
\hline Alternative Energy & .5 & \(10-12\) & 51 \\
\hline Architectural Design (CAD) & .5 & \(10-12\) & 51 \\
\hline CNC Technology & .5 & \(10-12\) & 51 \\
\hline Digital Photography & .5 & \(10-12\) & 50 \\
\hline Electrical Energy & .5 & \(10-12\) & 51 \\
\hline Electric Vehicle Design & 1 & \(11-12\) & 51 \\
\hline Engineering Design (CAD) & 1 & \(9-12\) & 49 \\
\hline Introduction to Engineering Technology & 1 & \(9-12\) & 49 \\
\hline Marine Transportation & .5 & \(10-12\) & 52 \\
\hline Robotics Technology & .5 & \(10-12\) & 52 \\
\hline Small Gas Engines & .5 & \(10-12\) & 52 \\
\hline Video Production & .5 & \(9-12\) & 50 \\
\hline Woodworking Technology & 1 & \(10-12\) & 49 \\
\hline
\end{tabular}

\section*{WORLD LANGUAGES}
\begin{tabular}{|l|l|l|l|}
\hline Course Title & Credit & Open to Grades & Page \# \\
\hline Level 2 Chinese Language and Culture I & 1 & see prerequisites & 53 \\
\hline Level 2 Chinese Language and Culture II & 1 & see prerequisites & 53 \\
\hline Level 1 Chinese III & 1 & see prerequisites & 53 \\
\hline Level 1 Chinese IV & 1 & see prerequisites & 54 \\
\hline ECE Intermediate Chinese II & 1 & see prerequisites & 54 \\
\hline Chinese AP or V & 1 & see prerequisites & 54 \\
\hline Level 2 French 1 & 1 & see prerequisites & 55 \\
\hline Level 2 French II & 1 & see prerequisites & 55 \\
\hline Level 1 French III & 1 & see prerequisites & 55 \\
\hline Level 1 French IV & 1 & see prerequisites & 55 \\
\hline ECE French Grammar and Composition & 1 & see prerequisites & 56 \\
\hline AP French or French V & 1 & see prerequisites & 56 \\
\hline ECE French Global Culture I & 1 & see prerequisites & 56 \\
\hline Level 2 Latin I & 1 & see prerequisites & 57 \\
\hline Level 2 Latin II & 1 & see prerequisites & 57 \\
\hline Level 1 Latin III & 1 & see prerequisites & 57 \\
\hline Level 1 Latin IV & 1 & see prerequisites & 57 \\
\hline ECE Topics in Advanced Latin & 1 & see prerequisites & 58 \\
\hline Level 2 Spanish II & 1 & see prerequisites & 58 \\
\hline Level 1 Spanish III & 1 & see prerequisites & 58 \\
\hline Level 1 Spanish IV & 1 & see prerequisites & 59 \\
\hline ECE Spanish Conversation/Cultural Topics & 1 & see prerequisites & 59 \\
\hline AP Spanish Language \& Culture & 1 & see prerequisites & 59 \\
\hline ECE Spanish Intermediate Composition & 1 & see prerequisites & 59 \\
\hline
\end{tabular}

Lyme-Old Lyme High School```

