

Revised July 2024

Program of Studies 2024-2025

LIBERTY HIGH SCHOOL



Thank You *Mahalo*
Tachi **Kiitos**
Grazie **Toda**
Takk **Thanks**
Gracias **Merci**

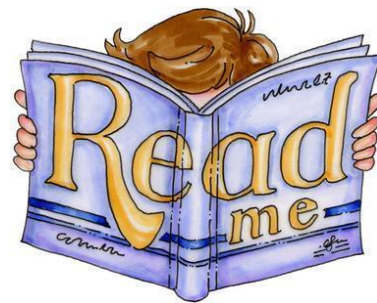


Table of Contents

General Information

Level/Placement Selection
Course/Schedule Changes
Adding Courses
Withdrawing from Courses
Add/Drop/Withdraw Request Form
Progress Reports
Report Cards
Alternative Means of Earning Credit
College Courses
Independent Study
Summer School Programs
Early Graduation
Grading System & Calculation of Cumulative Averages
High School Courses and Grading
After Failure-Options
Senior Class Averages, Ranks, and Honors
Honor Roll
National Honor Society
Graduation Requirements

Special Programs

Academic Intervention Services
Adaptive Physical Education Program
Advanced Placement Program
Sullivan County Community College Courses
Syracuse University Project Advance (SUPA) Courses
Career and Technical Education Program
English as a New Language (ENL) Program
Special Education Program

Course Descriptions

Leadership

Freshman Leadership Orientation
Leadership in Facilitating Education (L.I.F.E.)

Art

Studio Art
Advanced Studio in Art A & B
Ceramics 1
Ceramics 2
Drawing and Painting 1/Drawing and Painting 2
Graphics Design 1
Graphics 2
Photography 1
Photography 2 - SUNY Sullivan (SCCC)
Photography 3 - SUNY Sullivan (SCCC)

Video Production
Individual Arts Assessment Pathway (IAAP) In Visual Art

Art - Independent Study

Business

Career and Financial Management
Entrepreneurship
Marketing
Personal Finance
Introduction to Computer Science
Sports and Entertainment Marketing
Fundamentals of Accounting - SUNY Sullivan (SCCC)
Business Math - SUNY Sullivan (SCCC)
Career Exploration Internship Program (CEIP)
Business INCubator

English

English 9 (9 Honors; 9 Regents)
English 10 (10 Honors; 10 Regents)
English 11 (11 Honors; 11 Regents)
English 11 Honors/Advanced Placement
Composition 1 (College-level Effective Writing) - SUNY Sullivan (SCCC)
Fundamentals of Speech - SUNY Sullivan (SCCC)
English AIS

World Language

Mandarin I
Mandarin II
Spanish 1 Exploratory
Spanish Language Arts
Spanish 1B
Spanish II
Spanish III (Regents)
Spanish IV - SUNY Sullivan (SCCC)
Spanish V - SUNY Sullivan (SCCC)

Mathematics

Algebra 1A
Algebra 1B
Algebra 1
Informal Geometry
Regents Geometry
Algebra 2
Math with Financial Applications
Elementary Statistics - SUNY Sullivan (SCCC)
College Algebra - SUNY Sullivan (SCCC)
Pre-Calculus - SUNY Sullivan (SCCC)

Calculus - SUNY Sullivan (SCCC)
General Math
Math AIS

Music

Symphonic Band
Honors Band (Wind Ensemble)
Mixed Chorus
Honors Chorus
Orchestra
Honors Orchestra
Jazz Ensemble
Music Appreciation
Music Theory 1
Music Theory 2
Musical Theater
Piano Lab

Physical Education and Health

Physical Education
Aerobics
Health
Personal Fitness
Advanced Personal Fitness

Science

Living Environment - Biology (Regents)
Conceptual Biology
Earth Science (Regents)
Honors Earth Science (Regents)
Chemistry (Regents)
Physics (Regents)
Environmental Science
Physics of Toys
Forensics
General Biology I & II - Syracuse University Project Advance (SUPA)
General Chemistry I & II - Syracuse University Project Advance (SUPA)

Social Studies

Global History - 9 and 9H
Global History - 10 and 10H
United States History and Government - 11
United States History and Government I and II - SUNY Sullivan (SCCC)
Economics and Economic Decision Making - 12 and 12H
Participation in Government - 12
Political Science - SUNY Sullivan (SCCC)

Technology

Materials Processing
Production Systems
Computer Aided Design
Design and Drawing for Production
Architectural Drawing
Principles of Engineering (Emphasizing Mathematics, Science, and Technology)
Creativity and Innovation
Transportation Systems

GENERAL INFORMATION

Level/Placement Selection

Teacher recommendations for courses and course levels are valuable information for students and their parents/guardians to consider in the course planning process. The basis for placement into an Honors and College course is teacher recommendation and average in current subject area. In order to receive a recommendation for an Honors-level course, the student must have a 90 average in a Regents-level course or 85 in an Honors-level course. The student must also demonstrate good attendance, work habits, and higher level thinking skills. Placement in Advanced Placement courses complies with standards specified in the course offering section of this booklet. All students who sign up for Advanced Placement (AP level) courses must take the AP exam offered by the College Board in May.

Students placed in an Honors-level course without teacher recommendation will be on a five-week probationary basis. If the student is not achieving satisfactorily at the end of the five-week probationary period for Advanced Placement or Honors-level courses, the school counselor will place him/her in a more appropriate placement according to his/her ability.

Course/Schedule Changes

Students must carry a minimum of five to six units of credit plus physical education annually (equalling 5.5 credits or more). However, the majority of students carry additional units to proceed with their class, meet graduation requirements, pursue advanced study, etc. Liberty High School students will follow these procedures for the adding and dropping of courses (see Add/Drop Request Form on next page).

Adding Courses:

A student may add a one-semester course (September-January or February-June) within the first five days of the semester. A student may add a full-year course within the first ten days of the course. The student may only add courses with the permission of the parent/guardian, teacher, and school counselor.

Withdrawing from Courses:

A student may withdraw from a one-semester course (September-January or February-June), within the first five days of the school year. The student will not receive a grade nor will any penalty apply. A student may withdraw from a full-year course within the first ten days of the course. The student may only withdraw from courses with the permission of the parent/guardian, teacher, and school counselor. The student will not receive a grade nor will any penalty apply.

After the first five days of a one-semester course or the first ten days of a full-year course, a student may add/withdraw from a course when the student, the student's parent/guardian, the course teacher, and the school counselor agree that withdrawing from the course is in the student's best interest. The Building Principal must grant approval PRIOR to making the changes. If the add/withdraw request receives approval from the Building Principal, the grade will show on the student's report card followed by a W/P if the student is passing and W/F if the student is failing. The unweighted grade will be included for both the marking period average and class rank for that year. All students must maintain five credits plus physical education.

Notes:

1. Independent Study courses follow the same add/withdraw procedure as regular courses.
2. The final decision regarding the adding and withdrawing from all courses rests with the High School Principal.

LIBERTY HIGH SCHOOL
Guidance Office
292-5400 x2006

ADD/DROP/WITHDRAW REQUEST

Name: _____ **Date:** _____

Grade: _____ **Homeroom Teacher:** _____ **Home Phone:** _____

September 21, 2023 is the last day to add/withdraw from a course for full-year and first semester courses. February 5, 2024 is the last day to add/withdraw from second semester courses. Any other changes must have administrative approval before obtaining all other required signatures.

ADD

Withdraw

PERIOD	COURSE NAME	TEACHER SIGNATURE		PERIOD	COURSE NAME	TEACHER SIGNATURE
1				1		
2				2		
3				3		
4				4		
5				5		
6				6		
7				7		
8				8		
9				9		

This change will be effective _____ (Date changed in the system)

Student Signature: _____

Parent Signature: _____

Counselor Signature: _____

Administrator Signature: _____

Comments:

Progress Reports

The school issues progress reports, which indicate both satisfactory and unsatisfactory academic performance, to students and parent/guardian(s) at the midpoint of each of the four ten-week marking periods. It is the prerogative; however, of each teacher to issue a progress report at any time during the school year.

Report Cards

The school issues report cards at the end of each of the four ten-week marking periods. Parent/Guardian(s) should note not only the marking period grade but also the teachers' comments regarding effort, attendance, and conduct. The school strongly recommends that, at a minimum, parent/guardian(s) contact appropriate teachers with questions and/or concerns.

Parent/Teacher Conferences take place once during each of the two semesters. Parents, at that time, will have an opportunity to have individual conferences regarding the academic progress of their child. Parent/Teacher Conferences can also occur at any time by calling the Guidance Department or a building administrator to set up a scheduled conference with one teacher or a number of teachers.

Alternative Means of Earning Credit

In addition to enrollment in courses of study, students may earn credit toward a diploma through enrollment in college courses, community study, work-study, credit by examination, independent study, and summer school programs.

College Courses

Seniors wishing to take college courses for high school credit and/or supplement the high school curriculum may make this request of their school counselor. You must request written permission to take college courses for high school credit from the High School Principal, who specifies the number of high school credits allowed upon successful completion of the college course. The student receives one-half unit of high school credit for satisfactory completion of a one semester, three-credit college course. A student may not take a college-level course if LHS offers a similar course. More information on the courses offered is available in the Course Description section of this book and in the [LHS Dual Enrollment College Level Courses](#) list

Independent Study

Students may elect to earn high school credit on an independent study basis provided we offer the course, and they enter into a written agreement (standard form) signed by all parties (student, parent/guardian, teacher, school counselor, and high school principal), which identifies the specific areas of study, time allocation, procedures, credit to be awarded, and manner of evaluation. All independent study courses will follow the same rules as all other courses (add/withdraw policy, grading, exams, etc.). There are no independent study options for college courses. The form is available in the Guidance office and the student must complete the form prior to the start of the course.

Summer School Programs

Students have the opportunity to attend the Liberty Summer School Program (when offered) to make up failed courses and earn credit for these courses, provided they have achieved at least a 60 overall average during the regular school year and they have a maximum of 18 unexcused absences. Other school summer programs are available through different schools (SC BOCES, etc), which may have a cost and different criteria. Students may also earn credit for accelerated courses by attending summer schools offering accelerated courses in nearby communities. Students should finalize summer school

plans with school counselors before enrollment in any summer school program.

Early Graduation

Occasionally, it is in the best educational and personal interests of a student to complete diploma requirements in less than four years. A student who is interested in graduating early must:

1. Indicate interest in early graduation to his/her school counselor by midyear of the second year of high school study. The teacher, counselor, and principal recommendation form should be completed in the month of May, of 9th or 10th grade.
2. Discuss with his/her school counselor:
 - School achievement to date
 - Post-secondary plans
 - Career goals
 - Benefits of early graduation
 - Plan for completing diploma requirements in three or three and one-half years
3. Complete a Liberty High School Request for Early Graduation Application with the assistance of their school counselor.
4. Participate in a conference with his/her parent/guardian and the assigned School Counselor and High School Principal to discuss the request for early graduation.

Within one month following the student-parent-principal conference, the High School Principal will notify the student and his/her parent/guardian of the decision regarding early graduation.

Grading System and Calculation of Cumulative Averages

Procedure for High School Grades 9-12 Grading System

1. Numerical Grading System - All high school level credit-bearing courses receive numerical grades including non-credit bearing and pass/fail courses. This includes Freshman Leadership Orientation, Resource Room, ENL Support, and AIS. The numeric averages from Freshman Leadership Orientation, Resource Room, ENL Support, and AIS will not be calculated into GPA or ranking but allows them to be used for academic eligibility.
1. The calculations used for final grades and cumulative averages follow:
 - a. Calculation of Final Grades
 - i. The calculation of the final grade of full-year course consists of adding the four marking period grades and final exam or Regents exam grade and then dividing by five (20% each)
 - ii. The calculation of the final grade of half-year course consists of adding each of the two marking period grades and multiplying by two. You add those two quantities to the final exam grade giving a total and then divide by five.
 - b. Calculation of Cumulative Average (Implementation of this procedure began with the class of 2000 and was updated in 2024-2025).
 - i. All high school level credit-bearing courses receiving a numerical grade are included in calculating cumulative averages.
 - ii. The calculation of the GPA consists of taking quality points multiplied by the GPA factor. Quality points are the same as the student's numeric grade. (A

student receiving a grade of an 85 will receive 85 quality points.)

The GPA Factor (grade weighting) is as follows:

Regents/All courses	= 1.00
Accelerated (ACC)	= 1.05
Honors	= 1.05
Algebra 2, Regents Chemistry, and Regents Physics	= 1.05 (Sophomore class only)
Sullivan Community College	= 1.07
Advanced Placement	= 1.07
Syracuse University (SUPA)	= 1.09

Examples:

1. A student receives an 85 in English 11R as a final average – 85 (quality points) times 1.00 (GPA factor) = 85 (cumulative average)
2. A student receives an 85 in English 11H as a final average – 85 (quality points) times 1.05 (GPA factor) = 89.25 (cumulative average)
3. A student receives an 85 in English 11AP as a final average – 85 (quality points) times 1.07 (GPA factor) = 90.95 (cumulative average)
4. A student receives an 85 in General Biology I & II (SUPA) as a final average – 85 (quality points) times 1.09 (GPA factor) = 92.65 (cumulative average)

After all grades receive a weight accordingly, a straight mathematical average is calculated. The school uses this average for class ranking.

3. Passing Grades: A final grade of 65 will be required for passing the course and awarding of the appropriate number of credits.
4. Number of Marking Periods: All full-year courses will have four ten-week marking periods. Each marking period will have a mid-marking period progress report. All half-year courses will have two ten-week marking periods with a mid-marking period progress report.
5. Incompletes: Students receiving a grade of incomplete (I) have two weeks from the end of the marking period to submit the missing work to earn credit. After the two-week period, the teacher must submit a Grade Change Request and change the grade to the higher of the actual grade or 50.

High School Courses and Grading

Grading Policy for Change of Program: If a student transfers from one level of instruction to another in the same subject, all marks for the year must be used to obtain the yearly average. At the time of transfer, the initial teacher is responsible for indicating the grade of the student transferred to another level. For extenuating circumstances, see the Building Principal.

Grading Policy for Elective Courses: Teachers will grade each elective as an independent course. This means that the teacher will record the mark in the appropriate column and in the Final

Grade column. Each course shall receive ½ unit for the twenty-week course.

Grading Policy for Home Tutoring: Students placed on Home Tutoring status for more than five weeks will receive their grades from the Home Tutor unless the Home Tutor makes other arrangements with regular classroom teachers. Final average will include the grade of regular classroom teacher and Home Tutor (see guidelines for Home Tutoring for specifics).

Grading Policy for New Students: If a student transfers to Liberty from another school, the school counselor will evaluate his/her transcript and list the proper number of units on his/her permanent record card. If he/she enters during the year, the teacher will use any marks received from the previous school along with grades achieved at Liberty High School to obtain the final average.

Minimum Grades Given: Students must be given a 50 the first 2 quarters where a students' grade is lower than said 50, except in the last quarter of a year long course or the second quarter of a semester course. For semester courses a student will be given a 50 the first quarter where a students' grade is below said 50. The following criteria apply in order to receive a grade of a 50:

- Minimum Attendance:
 - Minimum in person period attendance of 50%
 - Minimum remote period attendance of 50%
 - Remote instruction: students must show participation in class.
 - For example one or more of the following: camera on, answering questions verbally, in chat, completing assignments). Not including excused absences for school activities.
- A 50 cannot be given in the last quarter of a year long course or the second quarter of a semester course.
 - We have the following semester courses- Forensics, Physics of Toys, Adv. Studio Art, Personal Finance, Sports Entertainment Marketing, Entrepreneurship, Career and Financial Management, Government, Economics, College US History, College Political Science, Honors Economics, and Comp/Speech.
- Grade of 0 is a disqualification to receive a 50.
 - Extenuating circumstances will always be a point of consideration.
- Minimum grade of 50 does not apply in honors, college classes and AP courses.
 - Rationale: These courses require high expectations. Additionally, alternative courses are offered in nearly all honors, college, and AP courses if students are misplaced in a class that they are not motivated to do well in.

Grades Given For Missed Work and Alternate Setting: Students who are absent will be given the opportunity to make up a test or other missed work and/or turn in a late assignment for inclusion in their final grade. Make-up opportunities must be completed by a date specified by the student's teacher for the class in question. (If the child has been in an alternate setting- hospital, etc only 25% of the work will be required to be made up over an extended period).

Senior Privileges: Seniors, who maintain an average of 75%, have no incompletes, and

demonstrate good school citizenship will be granted privileges. A student may leave school at the end of period 8, if the student has a study hall period 9. The student must sign out in the Main Office. Students signing out may not return to the building until after dismissal. Abuse of this privilege will result in loss of the privilege.

After Failure-Options

1. If a student fails a required course the following options apply:
 - i. The student may retake the course in summer school if he/she meets the eligibility criteria to enroll in summer school, which are a 60 average and a maximum of 18 unexcused absences.
 - ii. The student may retake the course the following academic year.

2. If a student fails a Regents exam, yet passes the course, the following options apply:
 - i. The student may retake the Regents exam, whenever available.
 - ii. The student may retake the course and Regents' exam in summer school. Both grades for the Regents exam will appear on the student's transcript. The teacher will use the first grade to calculate the grade point average.
 - iii. The student may retake the course and Regents' exam the following academic year. The school uses the higher average of the two grades in the calculation of the final average for the course. The final average for the course does not change if the student retakes the exam only. Both course grades and Regents' exam grades will appear on the student's transcript.

Senior Class Averages, Ranks, and Honors

All students receive a six-semester cumulative average and rank-in-class during the second week of October of their senior year. These averages are computed according to the guidelines established in the grading policy (for Grades 9-12), which appears earlier in the "General Information" section.

Seniors with the highest and second highest cumulative average computed after the third marking period of the senior year will receive the designation as valedictorian of the graduating class and salutatorian of the graduating class, respectively.

The first three marking period grades will be treated and consequently weighted as if they were full-year courses for the purposes of computing final averages, class rank, and class valedictorian and salutatorian.

Honor Roll

For each report card period, the school computes the honor roll as follows:

- **High Honor Roll** – Students must have attained a marking period average of 89.5 or better and have no failing or incomplete grades.
- **Honor Roll** – Students must have attained a marking period average of 84.5 or better and have no failing or incomplete grades.

National Honor Society

Sophomores, Juniors and Seniors who have achieved a minimum cumulative average of 90.00 (scholarship) are academically eligible for admission to the National Honor Society (NHS). Admission to the National Honor Society is also contingent upon a faculty council review of each candidate's

character, service, and leadership. Upon induction into the NHS, members must maintain a cumulative average of 90.00 and complete an approved service project.

If a member fails to live up to the four ideals of membership; scholarship (average falls below 88), leadership, character, and service, he/she may be removed by a majority vote of the five members of the faculty council or he/she may be placed on probation for one marking period in order to correct the situation. If he/she fails to do so, then the faculty council may remove him/her from the National Honor Society. The faculty council is a five-person committee mandated by the National Honor Society Chapter and selected by the High School Principal.

Graduation Requirements

For a regents diploma all students need a minimum of 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE), 2 physical education, and 3 ½ electives. In addition, each student must pass (65) 4 required Regents exams (one in each discipline: English, math, science, social studies); and successful completion of 1 pathway or a 5th Regents exam. Specific information can be found at:

<http://www.nysed.gov/curriculum-instruction/general-education-and-diploma-requirements>.

- **Enhanced diplomas and distinctions-** Enhanced diplomas and distinctions (Advanced, honors, etc.) are attainable and require additional achievement/coursework/regents exams. More information can be found at <http://www.nysed.gov/curriculum-instruction/general-education-and-diploma-requirements>.

SPECIAL PROGRAMS

Academic Intervention Services

Academic intervention classes are required for students who fail a Regents examination with a grade of 60-64 or who have attained a level 1 or a level 2 on an eighth grade state exam. The school schedules these students to attend small-group sessions every other day in addition to their regular classes. The State Education Department mandates these programs and the school must add them to a student's schedule. Once a student passes the Regents exam, the counselor will remove the AIS class from the student's schedule. A student who fails a Regents examination with a grade below 60 will retake the course for a more intense preparation.

Adaptive Physical Education Program

This program provides for the special needs of students within the Physical Education Program. Participating students still meet course requirements in a modified fashion and they will earn physical education credit for graduation. School counselors will place students in Adaptive PE based on the recommendation of the PE teacher to the Committee on Special Education.

Advanced Placement Program

The Advanced Placement Program, in conjunction with the College Board, offers honors-level students an opportunity to earn college credit while in high school. College credit is dependent upon the student's performance on the Advanced Placement Examination administered in May and the credit policy of the college or university of the student's choice. Students MUST sit for the AP Exam in order to be eligible for a passing grade. All examination costs are the responsibility of the student. Fee waivers are available to eligible students. Currently, the following Advanced Placement courses are available at Liberty High School:

- English Literature and English Language

Sullivan County Community College Courses

Presently, students may take Fundamentals of Accounting, Business Mathematics, Composition I, Speech I, Advanced Algebra, Pre-Calculus, Calculus, Elementary Statistics, Digital Photography 2, Digital Photography 3, Spanish 4, Spanish 5, United States History 1, United States History 2, Political Science, and Advanced Personal Fitness for college credits through Sullivan County Community College. The students are responsible for tuition to take this course. Financial assistance is available for eligible students. More information on these courses is available in the Course Description section of this book and in the [LHS Dual Enrollment College Level Courses](#) list.

Syracuse University Project Advance (SUPA) Courses

Presently, students may take General Biology I, General Biology II, General Chemistry I, and General Chemistry II through Syracuse University. The students are responsible for tuition to take this course. Financial assistance is available for eligible students. More information on these courses is available in the Course Description section of this book. More information on these courses is available in the Course Description section of this book and in the [LHS Dual Enrollment College Level Courses](#) list.

Career and Technical Education Program

Liberty High School participates in specialized occupational educational programs offered by the Sullivan County Board of Cooperative Educational Services. Students may enroll in the Career and Technical Education Programs at BOCES when they have attained status as a junior (11 earned HS credits) or senior (16.5 earned HS credits) (see section entitled "Class Standing"). LHS students

enrolled in the Career and Technical Education Program at BOCES will attend the AM session as first year students and the PM session as second year students. Students may earn seven and one-half credits over the two (2) years of enrollment in a CTE program. Students must earn a minimum course grade of 65 and must have satisfactory attendance in order to receive a recommendation for the second year of the program. A student may earn course credit from a CTE program in the follow manner for each year of successful completion in a program:

- .5 Math credits (1 total credit for 2 years of successful completion)
- .5 Science credits (1 total credit for 2 years of successful completion)
- .5 English credits (1 total credit for 2 years of successful completion)
- 2.25 Elective credits (4.5 credits for 2 years of successful completion)
- 3.75 total credits for each year of successful completion (7.5 total credits for 2 years of successful completion)

Occupational courses currently offered through the Career and Technical Education Program include:

- Animal Science
- Auto Body Repair
- Automotive Technologies
- Broadcasting/Music Production
- Commercial Drone Aviation
- Construction Technologies/Electrical Trades
- Cosmetology
- Culinary Arts and Sciences
- Early Childhood Education
- Health Occupations
- Health Occupations/Allied Health
- Innovative Design
- Natural Resources
- New Vision Health
- Public Safety Services
- Welding

Notes:

1. Occupational courses are subject to availability.
2. All Health programs require the passing of a proficiency exam with at least a 90%. The exam is a competency-based test, which means the student may retake the exam until he/she attains a score of 90%.

Attendance at CTE follows the same attendance policy as Liberty High School. Enrollment in a CTE program is an elective privilege; therefore, the school may remove students who do not adhere to the attendance and/or discipline policies from the program. In addition, a student who does not pass the first year in a CTE program may not return without administrative approval from the High School Principal. Course descriptions of all CTE programs are available in the Guidance Office.

English as a New Language (ENL) Program

The ENL teacher(s) identifies those students with limited English proficiency using the New York State Identification Test for English Language Learners (NYSITELL) and, in cooperation with the regular classroom teachers and school counselors, plans and delivers an educational program that meets the needs of the students. The school measures the student's language proficiency annually using the New

York State English as a Second Language Achievement Test (NYSESLAT) to determine progress and further participation in the ENL program.

In an ENL program, language arts and content-area instruction are taught in English using specific ENL instructional strategies. Some content area classes are Integrated ENL classes. Students receive core content area and English language development instruction, including the use of the home/primary language as support and appropriate ELL instructional supports to enrich comprehension. Integrated ENL classes are taught by a teacher dually certified in the content area and ENL or are co-taught by a certified content area teacher and a certified ENL teacher. In a Stand-alone ENL class, students receive English language development instruction taught by a NYS-certified teacher of English to Speakers of Other Languages (ESOL) in order to acquire the English language needed for success in core content areas. The school offers state mandated examinations, required for graduation, to ENL students in their native language.

Awarding of LOTE Credits

A New York State graduation requirement is that students must receive at least 1 (out of a minimum of 22 required to graduate) credit in a Language Other Than English (LOTE). Students may earn 1 high school credit in a Languages Other Than English (LOTE) based on documented residence and school attendance in an "other-than-English-speaking" environment, provided that the experience occurred at age 10 or older for at least one year and that the residence resulted in direct contact with that environment, its language and people.

At Liberty High School, students who provide the above mentioned documentation will receive 1 high school credit. Students may earn an additional 2 high school credits (3 total) with documented school attendance and residence in an "other than English-speaking" environment as stated above, and the student must pass the locally developed Checkpoint B examination. Students who receive 3 credits through this avenue may also receive LOTE credits through the successful completion in other courses such as Spanish Language Arts, Spanish 4 and Spanish 5.

If the student wishes to use the LOTE sequence in order to meet the requirements for a Regents diploma with advanced designation, the student must pass the locally developed Checkpoint B examination, thus receiving the 3 credits.

Special Education Program

Special Education is a comprehensive and integrated approach to assisting students who have learning difficulties that interfere with their potential for development. Each year, the Committee on Special Education (CSE) develops an Individual Education Program (IEP) to meet the student's intellectual, emotional, and physical needs.

The Special Education Program includes the student in regular education classes as often as possible. Special Education teachers work with the regular education teachers to help assure student achievement and success. The school provides access to all available resources as well as remediation techniques, establishment of short and long-term objectives, and assessment. In addition, self-contained special education classes exist on an as needed basis reflective of student individual education plans.

All students who have an Individualized Education Plan will interact with a case manager. The case manager will serve as a liaison for the student, parent/guardian, and school personnel. The case manager will attend meetings, provide feedback from teachers, and participate in the transition planning

process for students. A parent may contact the case manager and/or the school counselor with any questions or concerns regarding their son or daughter's educational program or progress.

COURSE DESCRIPTIONS

LEADERSHIP

REQUIRED COURSE - Freshman Leadership Orientation

The Freshman Orientation to Leadership is a half credit course designed to assist incoming freshman to acclimate to high expectations and rigor of the upcoming high school experience and what comes beyond. The cornerstone of the class is the tenets of the Seven Habits of the Leader in Me program. The Leader in me is an evidence-based, comprehensive model that builds leadership and life skills in students, creates a high-trust school culture, and lays the foundation for sustained academic improvement. Students will also be instructed in how to utilize the seven habits to promote their own leadership and self advocacy skills. This course supports civic mindedness whereas that is defined as, "Civic readiness is the ability to make a positive difference in the public life of our communities through the combination of civic knowledge, skills and actions, mindsets, and experiences." This course is a direct support of our mission to graduate lifelong learners who have been empowered through the collaborative efforts of the school, parents, and community. Furthermore, this course will help achieve our vision at Liberty High School, which is to be a safe learning community that celebrates our achievements and encourages active partnerships with families and the entire community. We will be a collaborative partnership preparing students who are college and career-minded, who are prepared to embrace the challenges and opportunities of the future.

- **Grade:** 9
- **Prerequisites:** Required
- **Length:** 20 weeks (Every other day)
- **Final Evaluation:** None
- **Credits:** .5

Leadership in Facilitating Education (L.I.F.E.)

This course offers high school students the opportunity to earn .5 credit over the school year by working as classroom leaders to strengthen personal and group leadership skills. Students will assist teachers, incorporate leadership skills, and apply the principles of "The Leader in Me: Habits of Highly Effective Teens." The course will include practical experience, reflective practice, peer collaboration, public speaking, lesson delivery, organization and management, group dynamics, effective communication, and project-based assessments. Students will be assigned to a teacher and work with the school social worker to hone their skills.

- **Grade:** 11 – 12
- **Prerequisites:** Completed/Passed Freshman Leadership Orientation
- **Length:** 40 weeks every other day (2 semesters) or 20 weeks everyday (1 semester)
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1/2

ART

Studio Art

A required foundation course in Studio Art designed to develop a visual and aesthetic awareness, while exploring a wide variety of media and developing basic skills. The emphasis will be on two-dimensional work, although the class will explore some three-dimensional media. Areas to be included are design; perspective; sketching and renderings in pencil; painting; and an introduction to the basics of sculpture using clay and other materials. The class will incorporate exposure to major movements in art into the studio experience.

- **Grade:** 9 – 12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Advanced Studio in Art – A and B

Advanced Studio will follow and build upon the skills and knowledge acquired in Studio in Art. The class offered two cumulative semesters of exploration in two-dimensional and three-dimensional work. Areas of exploration may include drawing, painting, graphics, design, construction, basic sculpture, and mixed media projects. The students will produce work suitable for inclusion in portfolios. It is required that students take both semesters.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Ceramics 1

A one year course of Ceramics offers an introduction to clays, glazes, and various surface treatments, while developing knowledge of the relationship of form and function. Emphasis is on hand-built forms as well as wheel-thrown forms. Students design, construct, and finish projects and learn to comment on their work.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art
- **Length:** 40 weeks each
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Ceramics 2

This Advanced Ceramics course offers a one year course in which students will continue to explore selected styles and techniques of working with clays, glazes, and additional surface treatments. This

course places greater emphasis on combined forms of wheel-thrown and hand-built pieces.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Drawing and Painting 1/Drawing and Painting 2

This course offering consists of two cumulative semesters in which students will explore various techniques of drawing using different media, surfaces, and styles. This course will carry drawing into paintings using watercolor, tempera, acrylic, inks, and combinations of media. Students will produce works suitable for inclusion in portfolios. Students may be involved in school and community-wide mural projects.

- **Grade:** 10 – 12
- **Prerequisites:** 75 or better in Studio in Art (Drawing and Painting 1 is a prereq for 2)
- **Length:** 40 weeks each
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Graphic Design 1 (Not offered 2024-2025)

This year-long course explores Graphic layout, design skills, advertising techniques and developing an artistic voice through digital media. Some 3 D work is included but primarily, students work in PhotoShop as their canvas.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art
- **Length:** 40 weeks each
- **Final Evaluation:** Portfolio Review
- **Credits:** 1

Graphic Design 2 (Not offered 2024-2025)

Students will pursue projects in specific graphic media of their own choosing as well as teacher driven assignments and will develop their expertise in these areas. This course places emphasis on major projects suitable for inclusion in portfolios.

- **Grade:** 11 – 12
- **Prerequisites:** Studio in Art, Computer Graphics 1 and successful completion of the first semester
- **Length:** 40 weeks each
- **Final Evaluation:** Portfolio Review
- **Credits:** 1

Photography 1

Photography 1 is an introduction to developing the eye, the technique and the heart of a photographer, combining technical and creative skill. Students will learn how to use their or a school camera to complete varied assignments. This course will teach composition, theory, and visual literacy along with technical skills. **Additional time outside of class is required along with participation and attendance at shows.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art
- **Length:** 40 weeks each
- **Final Evaluation:** Portfolio Review
- **Credits:** 1

Photography 2 - SUNY Sullivan (SCCC)

In this advanced level of Photography using digital media, students will use the knowledge and skills developed in Photography 1 to develop their own voice. The student will develop major projects in self driven concentrated areas. The student will produce works suitable for inclusion in portfolios and submit an AP 2 Design portfolio in May. Students may take this course for college credit through SCCC and AP accreditation concurrently.

- **Grade:** 10 – 12
- **Prerequisites:** Studio in Art and Studio in Photography I
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Portfolio
- **Credits:** 1 high school credit and 3 college credits with the option of another 3 AP college credits (6 total) (with tuition payment)

Photography 3 - SUNY Sullivan (SCCC) (Not offered 2024-2025)

Photography 3 is a more advanced year of portfolio development where almost all of the assignments are student driven. Students may take this course for additional college credit. Students can graduate with 9 College credits in Photography

- **Grade:** 11 – 12
- **Prerequisites:** Studio in Art and Photo 1, Studio in Photography 2 and permission of instructor
- **Length:** 40 weeks each
- **Final Evaluation:** Portfolio Presentation
- **Credits:** 1 high school credit and 3 college credits (with tuition payment)

Video Production (Not offered 2024-2025)

This course is an introduction to speaking through digital video. Students will learn how to organize shots prior to shooting, aesthetically produce work, and deliver messages through the media. They will introduce the proper use of technology to capture and edit the works including camera use, lighting, and sound recording. Students will capture and produce works for school activities after school hours as well.

- **Grades:** 9 – 12

- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Individual Arts Assessment Pathway (IAAP) In Visual Art

This offering allows students with an interest in the Arts to delve deeper into themed works and process. This student driven opportunity encompasses 3 years of study and culminates in a final submitted portfolio including goal setting, reflections and statements supporting works from each course and is a Pathway to graduation that is signified on your diploma and transcript.

Art – Independent Study

This course is mainly for Art majors. Permission of the instructor is required. The objective of this course is to allow students to make use of their knowledge of design and develop their aesthetic abilities by in-depth study in a particular area of interest. The individual student and the instructor will develop criteria and expectations on a one-to-one basis. The student may repeat Independent Study.

- **Grade:** 11 – 12
- **Prerequisites:** Studio in Art and permission of instructor
- **Length:** 20 weeks each
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½ each

BUSINESS

Career and Financial Management (Not offered 2024-2025)

Career and Financial Management will explore personal financial planning, career planning, money management, consumer purchases and protection, personal banking, credit cards/debts, housing, stocks/bonds, tax preparation, home/vehicle/health insurance, and other types of financial decisions made throughout life.

Hands-on experience will include Internet activities, actual applications, and contact with community businesses and their procedures in regards to personal finances.

- **Grade:** 10-12
- **Prerequisites:** None
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Entrepreneurship (Not offered 2024-2025)

Students explore the steps necessary to starting a business, including analyzing the market, finding financing, and creating a form of organization that will accommodate future growth. They learn about the operational issues that new businesses face, such as regulations, protecting intellectual property, and the financial risks of starting a business. Students examine ethical issues and develop a framework for

managing them. Finally, students identify the risks, returns, and other aspects of entrepreneurship as a potential career.

- **Grade:** 11-12
- **Prerequisites:** None
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Marketing (Not offered 2024-2025)

Students will learn about consumer buying and business selling psychology, product pricing, distribution, and other principles and strategies. This course will also cover retail management, advertising, and careers in the sales and marketing field. This course will apply teamwork and project-based learning strategies used in business.

- **Grade:** 11-12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Personal Finance

The goal of Personal Finance is to help students to become financially responsible, conscientious members of society. To reach that end, this course develops students' understanding and skills in such areas as money management, budgeting, financial goal attainment, the wise use of credit, insurance, investments, and consumer rights and responsibilities.

- **Grade:** 10-12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Introduction to Computer Science

This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science. No prior computer science knowledge or experience is necessary for this course.

The course was designed to be used in a blended classroom. The course will consist of video lectures, daily programming exercises, longer coding assignments, regular quizzes, projects, and exams. Students will also participate in online discussion forums. The primary language for the course is Python.

- **Grade:** 9-12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Exam
- **Credits:** 1

Sports and Entertainment Marketing (Not offered 2024-2025)

Sports and Entertainment Marketing is a specialized marketing course that develops student understanding of the sport/event industries, their economic impact, and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Students acquire an understanding and appreciation for planning. Throughout the course, students experience problem-solving situations for which they must apply academic and critical-thinking skills. Participation in cooperative education is an optional instructional method, giving students the opportunity to apply newly acquired marketing skills in the workplace.

- **Grade:** 11-12
- **Prerequisites:** None
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Fundamentals of Accounting - SUNY Sullivan (SCCC)

This is a college level course through Sullivan County Community College that provides students with a general understanding of proper record keeping procedures used in business and for personal use. This course will contrast procedures used by a service business with that of a merchandising business in addition to the differences of a business organized as a sole proprietorship and a partnership. Students will learn how to maintain the daily financial records of a business, prepare and interpret financial statements, and record and process a payroll. Students will complete at least two business simulation projects throughout the course. Students may use a calculator.

- **Grade:** 10-12
- **Prerequisites:** 2 math credits and successful completion of Algebra Regent exam.
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1 high school credit and 3 college credits (with tuition payment)

Business Math - SUNY Sullivan (SCCC)

This course is a college level course through Sullivan County Community College. The course covers the mathematics used in everyday business and accounting. Among the topics included are fractions and decimals, the use of algebraic equations, percent's and their applications, sales and trade discounts, markup, payroll, checking accounts, simple and compound interest, discounting of notes, present value, taxes, and business statistics. In addition to counting as a business credit, this course can also count as the third math credit for any high school student's graduation requirement.

- **Grade:** 10-12

- **Prerequisites:** 2 math credits and successful completion of the algebra regents
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1 high school credit (business or math credit) and 3 college credits (business credit only) (with tuition payment)

Career Exploration Internship Program (CEIP) (Not offered 2024-2025)

The Career Exploration Internship Program is a New York State registered program that gives students the opportunity to explore a career of interest to them in an unpaid internship. Any career is acceptable to pursue. Students gain valuable experience working alongside a career professional, which can help in college acceptance as well as gaining meaningful employment skills. This can be a one-semester or year-long program. Students must be a junior or senior and be able to provide their own transportation. Application packets are available in the Guidance Office and in the Business Department. Interviewing takes place in May for placement for the fall and spring semesters. If accepted, the internship is scheduled as a 9th period class for fall/spring semesters on the student's schedule and they attend class once per week during 9th period. Students must apply to the program, be interviewed by the internship coordinator, and obtain two teacher recommendations. Consideration for acceptance is based on student availability, responsibility, sincere desire, dependability, and attendance/tardiness records.

If accepted, the internship coordinator works with parents and the student to find an appropriate placement in the community. Students must intern 54 hours during the semester, and attend a class every other day with the internship coordinator and other CEIP students. Students make their own schedule with the mentor to meet the 54 hour requirement per semester. The student is able to participate in the CEIP for a maximum of two semesters, or one full credit. The schedule is based on student/mentor availability. 54 hours at the internship site and fulfilling the classroom component will result in the credit for the course.

- **Prerequisites:** None
- **Grade Level:** 11-12
- **Credits:**

½	(54 Internship hours + 27 Classroom hours)
1	(108 Internship hours + 54 classroom hours)

Business INCubator (Not offered 2024-2025)

This is a full year course using the INCubator curriculum and offering an authentic entrepreneurship experience as students develop their own product or service startup. Over the course of the rigorous full-year program, students team up to develop a business model canvas, gain market input on a minimum viable product (MVP), and continually test all elements to improve their business model. Class culminates with an investor pitch at the end of the year. Students trade out theory and simulation for real market experiences with processes that entrepreneurs use today. Lean methods help students test their thinking. From concept to MVP to pitch, students are hypothesizing, testing, adapting and learning. Importantly, they work and learn in teams to gain valuable skills required to be college or career ready. Throughout this hands-on course, students ideate, develop, and iterate their product or service startup in an attempt to gain investment funds in a final pitch event. Real entrepreneurs and business experts serve as volunteer coaches and mentors guiding student teams through the processes of developing hypotheses about a business concept, testing those hypotheses, adapting, and continually learning and improving. The businesses students build are real – they are not business cases or simulated experiences – which

means students experience mistakes, take risks, and learn to pivot based on market needs. Students leave the course with a completed Business Model Canvas, competitive analysis, financial model, minimum viable product, pitch deck, future communications plan, and future funding plan.

- **Grade:** 10-12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Final Project-Investor Pitch
- **Credits:** 1

ENGLISH

English 9 (9 Honors; 9 Regents)

This course builds upon the language arts skills mastered in English 8. The teacher will reinforce reading comprehension skills through study of common core adapted modules. This course focuses on writing that is applicable to common core-based Regents essay tasks. All students will also receive training (via the library) in the research process, particularly as it relates to researching online.

- **Grade:** 9
- **Prerequisites:** Successful completion of English 8 and teacher final recommendation. In order to receive a recommendation for an Honors-level course, the student must have a 90 average.
- **Length:** 40 week
- **Final Evaluation:** Test
- **Credits:** 1

English 10 (10 Honors; 10 Regents)

In English 10, students will use the process writing approach to facilitate their writing. This course gives particular attention to vocabulary skills as related to common core Regents-based reading and essay tasks. Students learn to read and interpret (in greater depth) various literary genres using adapted common core modules. This course incorporates listening and speaking units to the writing program, as is recommended in CCLS. This course makes a special effort to prepare the students for the common core Regents exam.

- **Grade:** 10
- **Prerequisites:** Successful completion of English 9 and teacher final recommendation. In order to receive a recommendation for an Honors-level course, the student must have a 90 average in a Regents-level course or 85 in an Honors-level course.
- **Length:** 40 weeks
- **Final Evaluation:** Test (based on the Regents Exam)
- **Credits:** 1

English 11 (11 Honors; 11 Regents)

Reading skills in literature are further refined. This course fosters literary analysis and criticism. Readings will include materials adapted from common core modules, with an emphasis on advanced critical thinking skills. This course also highlights nonfiction as is relevant to common core Regents

reading and essay tasks. Tests are writing intensive in preparation for the Regents exam. In addition, oral presentations are required to fulfill CCLS. Students learn test-taking techniques for the SAT, ACT, and the common core Regents examination.

- **Grade:** 11
- **Prerequisites:** Successful completion of English 10 and teacher final recommendation. In order to receive a recommendation for an Honors-level course, the student must have a 90 average in a Regents-level course or 85 in an Honors-level course.
- **Length:** 40 weeks
- **Final Evaluation:** Regents Exam
- **Credits:** 1

English 11 Honors/Advanced Placement

This is a college-level course. It is an intensive preparation for the Advanced Placement Examination in Literature and/or Language and Composition (a score of 3, 4, or 5 on the test may translate to college credit). The course consists of: (1) intensive reading comprehension practice; (2) familiarizing students with literary terms and concepts; (3) readings of high-quality literature; and (4) intensive essay writing. In short, the course is rigorous preparation for the AP exam and the Regents exam. Summer reading (prior to the start of the course in September) is required. Students MUST sit for the AP Exam and Regents in order to be eligible for a passing grade. The AP Examination usually takes place in May.

- **Grade:** 11
- **Prerequisites:** Demonstrated excellence in English 10 and teacher recommendation. In order to receive a recommendation for an Honors-level course, the student must have a 90 average in a Regents-level course or 85 in an Honors-level course.
- **Length:** 40 weeks
- **Final evaluation:** AP and Regents exams
- **Credits:** 1 high school credit and 3 college credits (with successful achievement of a 3 or 4 on the AP exam)

Composition 1 (College-level Effective Writing) - SUNY Sullivan (SCCC)

Students will draft and revise college-level essays in this writing-intensive course. Students will study the conventions of academic prose, examine various methods of organization and development, and learn research skills. A research paper serves as the final exam.

- **Grade:** 12
- **Prerequisites:** Successful completion of English 8-11 and a score of 78 or higher on the English Regents
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½ high school credit, 3 college credits

Fundamentals of Speech - SUNY Sullivan (SCCC)

This course provides public speaking training and practice.

- **Grade:** 12
- **Prerequisites:** Successful completion of English 8-11
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½ high school credit, 3 college credits

English AIS

This program in reading and/or writing provides supplementary instruction for those students whose test scores indicate a need for small group or individualized instruction to perform better in the content areas and to meet successfully the requirements of the English Regents exam. The non-credit program in writing is required for those students who score a one or two on their ELA exam or who fail the Preliminary or Regents Competency Test in Writing. Instruction focuses on all aspects of the writing process as determined by individual needs with special emphasis on skills needed to pass the English Regents exam. Student placement into AIS occurs with teacher recommendation. Improving test scores and classroom performance, and/or passing the English Regents Exam, allows students to exit from the program.

- **Grade:** 9 – 12
- **Prerequisites:** As stated above
- **Length:** As needed
- **Credits:** None

WORLD LANGUAGE

Students must successfully complete two units of study (1 high school credit) and pass a locally developed examination that is aligned to the Checkpoint A Learning Standards by the end of grade 9.

Mandarin I

This a one-year course, introducing the Mandarin language and culture. No previous knowledge of Mandarin is assumed or required. Students will practice the four language skills – listening, speaking, reading, and writing – with an emphasis on building basic communication skills. In addition, students will survey aspects of the history, culture, geography, and daily life in Mandarin speaking countries. The New York State Learning Standards for World Languages and World Readiness Standards for Learning Languages provide the curricular framework and rationale for the course. Students that successfully complete this course will take High School Mandarin 2 the following year in the high school.

- **Grade:** 9 – 12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test
- **Credits:** 1

Mandarin II

This is the second year course in a 3 year Regents track Checkpoint B sequence. The New York State Learning Standards for World Languages and World Readiness Standards for Learning Languages

provide the curricular framework and rationale for the course. The basic skills (speaking, listening, reading, and writing) continue to be developed with increasing emphasis on developing greater proficiency in reading and writing. The introduction of more complex grammar topics occurs with more regularity. The teacher will revisit and expand upon some topics from Mandarin 1 with additional vocabulary and more sophisticated content and concepts.

- **Grade:** 9-12
- **Prerequisites:** Successful completion of Mandarin 1 Accelerated and the Checkpoint A final exam in the middle school; in the high school, successful completion of Mandarin 1
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test
- **Credits:** 1

Spanish I Exploratory

Spanish I Exploratory is a one-year course, designed for students who simply want to earn a credit for World Language without continuing on, and/or also for students who may have struggled previously. The course introduces the Spanish language and culture, and no previous knowledge of Spanish is assumed. Students practice the four language skills – listening, speaking, reading, and writing – with an emphasis on building basic vocabulary. The New York State Learning Standards for World Languages and World Readiness Standards for Learning Languages provide the curricular framework and rationale for the course. Students will survey aspects of the history, culture, geography, and daily life in Spanish speaking countries. The introductory nature of the course permits students to become acquainted with Spanish at a basic level. This class is designed to assist students with obtaining one credit of study in a second language in order to meet the New York State requirement for graduation. Students who take this course are not eligible to continue taking Spanish without teacher recommendation.

- **Grade:** 9 – 12
- **Prerequisites:** For students who fail Spanish 1 Accelerated, Spanish Heritage, Mandarin 1 Accelerated in middle school, or did not pass the Checkpoint A final (local) exam in either of these classes.
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test and/or Project
- **Credits:** 1

Spanish Language Arts

The Spanish Language Arts course uses the New York State Standards and the World Readiness Standards for Learning Languages (ACTFL)) as a framework for instruction. The main goal of the course is to improve literacy in students whose first language is Spanish. While the topics follow the mentioned standards, they were also chosen because they are interdisciplinary; that is, their study could benefit students' comprehension of content in their other classes, such as ELA, science, history, math, art, and music. By examining and studying these subjects in Spanish, it is hypothesized that students will encounter high frequency words, tasks, and objectives characteristic of, and inherent in, the respective subjects.

- **Grade:** 9 – 12
- **Prerequisites:** For students whose first or second language is Spanish, or for those whose first or

second language is not Spanish but have successfully completed Spanish 3 and the final exam. Teacher recommendation is required.

- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test and/or Project
- **Credits:** 1

Spanish II

This is the second year course in a 3 year Regents track Checkpoint B sequence. The New York State Learning Standards for World Languages and World Readiness Standards for Learning Languages provide the curricular framework and rationale for the course. The basic skills (speaking, listening, reading, and writing) continue to be developed with increasing emphasis on developing greater proficiency in reading and writing. The introduction of more complex grammar topics occurs with more regularity. The teacher will revisit and expand upon some topics from Spanish 1 Accelerated and Spanish Heritage with additional vocabulary and more sophisticated content and concepts.

- **Grade:** 9 – 12
- **Prerequisites:** successful completion of Spanish I Accelerated or Spanish Heritage in the middle school., . Students taking Spanish 1 Accelerated and Spanish Heritage in middle school must also have passed the checkpoint A local exam to be eligible for the course. Students who pass Spanish Exploratory at the high school are eligible to take the course with teacher recommendation.
- **Length:** 40 weeks
- **Final Evaluation:** Local Exam
- **Credits:** 1

Spanish III (Regents)

The teacher will continue to instruct students in acquiring greater proficiency in reading, writing, listening and speaking skills in Spanish. The New York State Learning Standards for World Languages and World Readiness Standards for Learning Languages provide the curricular framework and rationale for the course. In this level, there will be a greater concentration than in previous years on building productive skills, namely writing and speaking. The teacher will continue to emphasize considerable vocabulary acquisition through various texts and discussion. The examination and practice of advanced points of grammar will also occur regularly to build capacity to converse in the past, present and future tenses.. Students will take a locally developed exam for Regents credit upon completion of this course. Students must pass both the course and the exam in order to receive credit.

- **Grade:** 9 – 12
- **Prerequisites:** Successful completion of Spanish II or Spanish Language Arts
- **Length:** 40 weeks
- **Final Evaluation:** locally developed exam for Regents credit
- **Credits:** 1

Spanish IV - SUNY Sullivan (SCCC)

New York State and ACTFL Standards provide the academic framework for the course. . Students will practice and hone the three modes of communication—interpersonal, presentational and interpretive—and apply and expand upon the skills acquired in Spanish I-III. The themes presented in each unit correlate

with the AP Spanish themes. A firm grasp of the basic grammatical and syntactical structures is assumed. Each unit will include several readings, vocabulary, grammar, and cultural topics. There will be a great focus on developing proficiency in reading comprehension and critical thinking skills as well as students' abilities to research and write in Spanish. Students will acquire more advanced grammatical knowledge. While advanced grammatical topics are examined in detail, they are not the primary content of the course and are addressed chiefly through daily reading and writing and obligatory use of Spanish in the classroom. Students have the option of taking this course for college credit.

- **Grade:** 11 – 12
- **Prerequisites:** Successful completion of Spanish III and passing the “Regents” (local exam)
- **Length:** 40 weeks
- **Final Evaluation:** final exam and/or a project
- **Credits:** 1 high school credit and 3 college credits (with tuition payment)

Spanish V - SUNY Sullivan (SCCC)

New York State and ACTFL Standards provide the academic framework for the course. Students will hone the three modes of communication—interpersonal, presentational and interpretive—and apply and expand upon the skills acquired in Spanish I-IV. A firm grasp of the basic grammatical and syntactical structures is assumed. There will be a great focus on developing advanced reading comprehension and critical thinking skills, and continued emphasis (from Spanish 4 -SCCC) on developing students' abilities to research and write fluently and persuasively in Spanish, and being able to effectively cite evidence for their claims. Each unit will include several readings, vocabulary, grammar, and cultural topics. While advanced grammatical topics are examined in detail, they are not the primary content of the course, and are addressed chiefly through daily reading and writing and obligatory use of Spanish in the classroom. Students have the option of taking this course for college credit.

- **Grade:** 12
- **Prerequisites:** Successful completion of Spanish IV
- **Length:** 40 weeks
- **Final Evaluation:** final exam and/or a project
- **Credits:** 1 high school credit and 3 college credits (with tuition payment)

MATHEMATICS

Algebra 1A (Not offered 2024-2025)

Algebra 1A is the first year of the revised Common Core Mathematics curriculum. This course is half of a two-year program that will culminate in the passing of the Algebra 1 regent's exam. Students will receive an introduction to the world of algebra. The teacher will stress functions and their notation throughout the year. Included in this course will be a review of all operations with polynomials, solving multi-step equations, with an emphasis on real world applications of the algebra, manipulating expressions and open sentences, and factoring binomials and trinomials. The teacher will address solving quadratic equations by factoring and completing the square. Students will perform graphing linear, exponential, absolute value, and quadratic functions. The class will explore solving systems of inequalities and equations using several different methods. The class will explore operations on algebraic fractions. Students will produce stem and leaf, box-and-whisker, scatter plots, lines of best fit,

and histograms for statistical data. The class will explore quartiles, percentiles, and standard deviation calculations. Problem solving and modeling will be the key strand, which will dominate all lessons.

- **Grade:** 9 – 10
- **Prerequisites:** Successful completion of Math 8
- **Length:** 40 weeks
- **Final Evaluation:** Local Final
- **Credits:** 1
- **Next Course:** Algebra 1B

Algebra 1B (Not offered 2024-2025)

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. This course deepens and extends understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The course prescribes that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Topics include; solving characteristic problems involving the analytic geometry of lines, adding/subtracting/multiplying polynomials, transforming expressions and chunking (seeing the parts of an expression as a single object) as used in factoring, completing the square, and other algebraic calculations.

- **Grade:** 10 – 11
- **Prerequisites:** Successful completion of Algebra 1A
- **Length:** 40 weeks
- **Final Evaluation:** Algebra Regents
- **Credits:** 1
- **Next Course:** Informal Geometry or Regents Geometry (with passing Algebra Regents exam grade and a 75 final course grade or better) or Math with Financial Applications

Algebra 1

Algebra 1 is the first year of the revised New York State Math curriculum. This one-year course will introduce students to the world of algebra. This includes a review of all operations with polynomials, solving multi-step equations with an emphasis on real world applications of algebra, manipulating expressions and open sentences, and factoring binomials and trinomials. Students will explore graphing and solving systems of inequalities and equations using several different methods. The class will explore linear, quadratic, absolute values, and exponential graphs. Students will also examine and produce linear regressions, statistical data, and statistical graphs. Problem solving will be a key strand and will dominate all lessons.

- **Grade:** 9
- **Prerequisites:** Successful completion of Math 8 or Algebra 1A
- **Length:** 40 weeks
- **Final Evaluation:** Algebra Regents
- **Credits:** 1
- **Next Course:** Informal Geometry or Regents Geometry (with passing Algebra Regents exam grade and a 75 final course grade or better)

Informal Geometry

Informal Geometry is a one year course that emphasizes a practical approach to the study of geometry and deemphasizes an abstract, formal approach. Topics include properties and operations of real numbers; evaluation of rational algebraic expressions; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, triangles and parallelograms in the coordinate plane; concepts of similarity, parallelism, perpendicularity, and proportions; and rules of angle measurement in triangles.

- **Grade:** 9-12
- **Prerequisites:** Successful completion of Algebra 1 or Algebra 1A and Algebra 1B.
- **Length:** 40 weeks
- **Final Evaluation:** Final Exam
- **Credits:** 1
- **Next Course:** Regents Geometry (with a passing Algebra Regents exam grade), College Algebra (with passing Algebra Regents exam grade), Elementary Statistics, or Math w/ Financial Applications

Regents Geometry

Geometry is a one-year course. Students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusion follows logically from their hypothesis. This course will employ an integrated approach to the study of geometric relationships. Integrating synthetic, transformational, and coordinate approaches to geometry, students will justify geometric relationships and properties of geometric figures. Congruence and similarity of triangles will be established using appropriate theorems. The classroom teacher will use transformations including rotations, reflections, translations, and glide reflections and coordinate geometry to establish and verify geometric relationships. A major emphasis of this course is to allow students to investigate geometric situations. Properties of triangles, quadrilaterals, and circles should receive particular attention. Students will use the traditional tools of compass and straightedge as well as dynamic geometry software that model these tools more efficiently and accurately, to assist in these investigations. Geometry will lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences.

- **Grade:** 9-12
- **Prerequisites:** Successful completion of Algebra 1 or Algebra 1A/Algebra 1B with a 75 final course grade or better, and a passing grade on the Algebra 1 Regents Exam
- **Length:** 40 weeks
- **Final Evaluation:** Geometry Regents
- **Credits:** 1
- **Next Course:** Algebra 2 (only with a passing Geometry Regents exam grade), or SCCC Advanced Algebra, or Math w/ Financial Applications).

Algebra 2

Algebra 2 is the third Regents level course in the new mathematics sequence. In order to obtain an advanced regents diploma, students must successfully complete this course and regents exam. Topics

covered will include solving rational, radical, quadratic, recognition of transformations, functions and relations, composition and inverse functions, Trigonometric functions and their graphs, exponential functions, logarithmic functions, complex numbers, statistics, sequences and series, regressions, and probability. Students will use graphing calculators to enhance instruction.

- **Grade:** 10 – 12
- **Prerequisite:** Successful completion of Algebra I and Regents Geometry and passing grades on each Regents exam.
- **Final Evaluation:** Algebra 2 Regents
- **Credits:** 1
- **Next Course:** Pre-calculus (passing grade on Algebra, Geometry, and Algebra 2 Regents exams) and/or Elementary Statistics

Math with Financial Applications

Math with Financial Applications is a one-year math class taken upon completion of Algebra 1A and 1B. This class offers a student one more year of math and prepares him or her for the dynamics of math outside of school. The class deals with various consumer topics, such as banking and mortgages, budgeting, income taxes, types of loans and the result of borrowing, buying versus renting, insurance costs, payroll data, investments, and other real life applications of mathematics.

- **Grade:** 10 – 12
- **Prerequisites:** Successful completion of Algebra 1A and 1B
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Elementary Statistics - SUNY Sullivan (SCCC)

The offering of the elementary statistics course at Liberty Central School is through Sullivan County Community College. Students learn about probability, frequency distributions, mean and standard deviation, the binomial distribution, the normal distribution, hypothesis testing, samples from a finite population, regression and correlation, confidence intervals, and chi-square tests.

- **Grades:** 11-12
- **Prerequisites:** Successful completion of Algebra 1 (or Algebra 1A and Algebra 1B) and Informal Geometry or and Regents Geometry. and a passing grade on one Regents exam
- **Length:** 40 weeks
- **Final Evaluation:** Project
- **Credits:** 1 high school and 3 college credits
- **Next Course:** CollegeAdvanced Algebra (with passing Algebra Regents exam grade) or Math with Financial Applications

College Algebra - SUNY Sullivan (SCCC)

The high school offers this course at Liberty Central School through Sullivan County Community College. Students will learn about polynomials, radicals, trigonometry of right triangles, Laws of Sine and Cosine, and the following types of functions: linear, quadratic, polynomial, rational, radical,

exponential, and logarithmic.

- **Grade:** 11-12
- **Prerequisites:** Successful completion of Algebra 1 (or Algebra 1A and 1B) and Informal Geometry or Regents Geometry (with at least 1 passed Regents exam grade)
- **Length:** 40 weeks
- **Final Evaluation:** College Final
- **Credits:** 1 high school and 4 college credits
- **Next Course:** Regents Geometry (if not already taken), Algebra 2 (with passing grades on Algebra and Geometry Regents exams), or Elementary Statistics or Math with Financial Applications

Pre-Calculus - SUNY Sullivan (SCCC)

The offering of the pre-calculus course at Liberty Central School is through Sullivan County Community College. Pre-Calculus consists of advanced algebra with a pre-calculus approach. The class will explore all of the Trigonometric functions and students will transform their graphs in the coordinate plane. Topics that will be covered are solving higher degree polynomials, mathematical modeling, applications in linear and angular velocities, linear programming, rational and exponential functions and their graphs, polar coordinates and equations, graphs of polar equations, powers and roots of complex numbers, conic sections, matrices, sequences and series, mathematical induction, and other topics as time permits. Because of the explorative nature of this course, the teacher will introduce many areas of math.

- **Grade:** 11 and 12
- **Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2 and passing grades on all Math Regents exams
- **Length:** 40 weeks
- **Final Evaluation:** Local final
- **Credits:** 1 high school and 4 college credits
- **Next course:** Calculus and/or Elementary Statistics

Calculus - SUNY Sullivan (SCCC)

The high school offers the calculus course at Liberty Central School through Sullivan County Community College. Upon successful completion of this class, the student will be able to:

- solve problems with limit
 - demonstrate use of various rules of differentiation
 - integrate expressions using appropriate integration rules
 - solve problems involving rate of change
 - solve optimization problems
 - find areas between curves and volumes using integration
 - demonstrate graphing with the help of techniques from calculus, and
 - integrate and differentiate natural log functions and exponential functions.
- **Grade:** 12
 - **Prerequisites:** Successful completion of Algebra 1, Geometry, and Algebra 2 and passing grades on all Math Regents exams. Also, successful completion of Pre-Calculus.

- **Length:** 40 weeks
- **Final Evaluation:** Final Exam
- **Credits:** 1 high school and 4 college credits
- **Next course:** Classes at SCCC

General Math

General Math is a one year course created to meet the needs of students that would benefit from a stronger foundation of skills presented in 7th grade, 8th grade, and the Algebra 1 Next Generation Mathematics curriculum. Students are recommended for this course based on 7th and 8th grade performance. Students will review foundational topics essential for successful algebraic thinking. Topics include the Real Number System, simplifying and evaluating variable expressions, solving and graphing linear equations and inequalities including systems of equations, ratios and proportions, functions, and statistics.

- **Grade:** 9
- **Prerequisites:** Recommendation by 8th grade teacher, failing grades in math in middle school (7th and/or 8th), or disrupted math education
- **Length:** 40 weeks
- **Final Evaluation:** Local Final
- **Credits:** 1
- **Next Course:** Algebra 1A or Algebra 1

Math AIS

Students receive Academic Intervention Services (AIS) if they will benefit from additional support outside of the regularly scheduled math courses. Students' placement in AIS occurs because students did not meet state mandated standards on the eighth grade math assessment or failed a required Regents exam. Students may exit AIS after they have obtained an 80% on the school final or a passing grade on the Integrated Algebra Regents.

- **Grade:** 9 – 12
- **Prerequisites:** Unsuccessful on math regents exam or teacher recommendation with approval of principal.
- **Length:** 40 weeks
- **Final Evaluation:** None
- **Credits:** 0
- **Next Course:** None

MUSIC

Symphonic Band

This performance-oriented class consists of all students in the LCHS bands. It is the core of the band program. This group studies, reads, and performs a wealth of literature for large wind and percussion groups. Students will participate in three required concerts and 1 parade per year. Performances at other venues will be considered based upon the readiness of the group. Periodic quizzes, performance evaluations, and a required weekly lesson are the basis for the grade in this course. Basic playing

components are stressed and practice techniques are enforced regularly.

- **Grade:** 9 – 12
- **Prerequisites:** MS Band or Teacher recommendation.
- **Length:** 40 weeks
- **Credits:** ½

Honors Band (Wind Ensemble)

This class provides a vehicle for students with advanced performance skills. While all Wind Ensemble members are required to participate in the Symphonic Band, on the alternate days we will explore more advanced wind ensemble literature based on a difficulty rating of NYSSMA Level 5 or 6. Works of more of a soloist nature are studied and each member must play independently. Selection to this group is based on the students' technical ability, their ability to work cooperatively and listen. A positive attitude, dependability and concert attendance are also part of the decision process. Proper balancing of sections within an ensemble is important, and as such, this is a factor in the selection process.

- **Grades:** 9 – 12
- **Prerequisites:** Teacher recommendation only
- **Length:** 40 weeks
- **Credits:** 1

Mixed Chorus

The mixed chorus meets every other day, 2-3 periods per week. This course allows students in grades 9-12 to participate in a varied program of study in vocal music. The Students will learn vocalization with emphasis on breathing, tone, projection, diction, balance, and sight-reading. Students will examine and perform a variety of styles, both sacred and secular, throughout the year. Mixed chorus students will be required to perform in the winter, pops, and spring concerts. Additional performance opportunities may arise which will also be required. Students are also required to attend a weekly voice lesson, develop proficiency on sight singing and make adequate progress. While NYSSMA solo festival is not required it is strongly encouraged and will be a deciding factor in Honors Chorus recommendation. Specific grade criteria distributed at the start of the semester.

- **Grade:** 9 – 12
- **Prerequisites:** MS Chorus or permission of choral director.
- **Length:** 40 weeks
- **Credits** ½

Honors Chorus

Honors Chorus meets daily. Honors chorus students are also part of the Mixed Chorus. This group will perform music that is more challenging. Students will be expected to learn basic music theory relevant to the choral singer; these are, but not limited to key signatures, reading melodies, pitch, rhythm and form. All performances are mandatory! Requirements will also include attending a vocal lesson each week, performing at the NYSSA solo evaluation and completing any assignments given. Students selected for Honors Chorus are expected to meet or exceed expectations in their musicianship, musical literacy and performance skills.

- **Grade:** 10 – 12
- **Prerequisites:** 1 year of HS Mixed Chorus AND recommendation of teacher.
- **Length:** 40 weeks
- **Credits** 1

Orchestra

Orchestra gives a large ensemble experience to all string students in grades 9-12. Students will explore many different styles of music and will perform them throughout the school year. This class stresses and enforces basic playing components and practice techniques on a regular basis. This ensemble meets every other day.

- **Grades:** 9 – 12
- **Prerequisites:** MS Orchestra or teacher recommendation.
- **Length:** 40 weeks
- **Credits:** ½

Honors Orchestra

Honors Orchestra challenges students with more advanced repertoire, usually of NYSSMA level 4, 5, or 6, as well as develops an emergent understanding of the music theory and analysis from a string player's perspective, such as scales and chords as they relate to intonation and musical phrase structure. Selection for this group is based on an Outstanding rating on a Level 4 NYSSMA solo or a rating of 90 or above on a Level 5 or Level 6 NYSSMA solo and the instrumental needs of the group. Prior approval and permission of the director are required before becoming part of this ensemble. Other components for selection include ability to follow directions, working well with others, a positive attitude, work ethic, and past performance history. *The director has the final choice of a student's eligibility for selection to this ensemble!* This ensemble meets every other day.

- **Grades:** 9 – 12
- **Prerequisites:** Teacher recommendation only
- **Length:** 40 weeks
- **Credits:** 1

Jazz Ensemble

Many people consider Jazz to be America's first art form. Students, who have proficiency on a Jazz Ensemble instrument (saxophone, trumpet, trombone, piano, guitar, bass, drum set) and can read music, may choose this elective. This course will introduce students to a wide variety of contemporary sounds including swing, jazz-rock, Latin and ballads. Class meets every "A" day. Public performances are a required part of this course.

- **Grade:** 9 – 12
- **Prerequisites:** Achievement of an intermediate level of performance on instruments listed above and enrollment in at least one other music class; approval of the Director is also required.
- **Length:** 40 weeks
- **Credits:** ½

Music Appreciation

This course provides students with the insight into music from the earliest of times to the present. Through Creating, Performing, Presenting, Responding and Connecting students will explore various genres of music from the middle ages to the Contemporary period. Students will begin to understand the important impact music has had. This course will emphasize the musical elements, for those are the foundation in which all music is composed. As consumers of music, various styles will be explored. The historical and cultural significance of music past and present. Specific course requirements and syllabus will be provided at the start of the year.

- **Grade:** 9 – 12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credit:** 1

Music Theory 1

Music Theory is a more in depth course about the language of music. Many elements, such as musical notation, scales, key signatures, chords, rhythm, and harmony will be explored. Listening and analyzing will be two areas of focus as well. This is a course for any musician who wants to improve. This course is an absolute must for those pursuing a career in music performance or education.

- **Grades:** 9 – 12
- **Prerequisites:** None
- **Length:** 20 weeks (half year semester) or 40 weeks (full year, alternating days)
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Music Theory 2

This course is open to all students in grades 10-12 and meets five times a week for a half year. It will continue the foundation laid down by Music Theory 1 with more complexity and application of more advanced techniques. The elements covered will include more advanced notation, aural skills, sight singing, listening, analyzing songs, part writing, keyboard harmony, an introduction to musical dictation, and some aspects of music history.

- **Grades:** 10 – 12
- **Prerequisites:** Successful completion of Music Theory I or exemption by exam
- **Length:** 20 weeks (half year semester) or 40 weeks (full year, alternating days)
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Musical Theater

Theater is a beginning course in theater that focuses on basic foundations and techniques in acting, improvisation, character analysis, and movement. This focuses the students on becoming familiar with

basic acting techniques, theater history, dance, theatrical design, and theater production. Students are required to participate in some aspect of the after school drama productions (musical and play) by means of volunteering the night of the performances or auditioning to be in the productions.

- **Grades:** 9 – 12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1

Piano Lab

This course will introduce basic piano skills including chords, scales and playing melodies. Students will develop a greater understanding of musical notation and more fully understand and become aware of aural and visual elements of music (rhythm, melody, and harmony). Daily practice is essential and expected for this class. This class is designed for those who have never played piano or have very limited knowledge of the instrument. Specific course requirements outlined at the start of the semester.

- **Grades:** 9– 12
- **Prerequisites:** Successful completion of Music Theory 1.
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** 1/2

PHYSICAL EDUCATION AND HEALTH

Every student who attends school must participate in a physical education program each semester they attend. If a student requires a special or adaptive physical education program, he/she should notify the Director of PE & Health, guidance counselor, school nurse, and PE teacher as soon as possible. A note from the student's physician will be required stating physical limitations, recommendations, and allowable activities for the student to participate. Students must dress appropriately in order to participate in physical education classes. All students are required to wear sneakers for safety and performance reasons. If a student cannot participate in PE classes for less than a week either due to minor injuries or upon returning to school following an illness, the student must deliver a note from the parent to the physical education teacher. If a student cannot participate in PE for more than a week, that student must deliver a note from his/her physician to the School Nurse. Students must complete make ups for all missed classes.

Physical Education

Physical Education consists of short units of team sports with an emphasis on personal fitness. The participant will be able to use technology to understand their body composition, how to increase cardiovascular endurance, flexibility, and strength. This personal fitness assessment complements self-management and adherence strategies. Strategy and rules comprehension of lifetime sports round out the program.

- **Grade:** 9, 10, 11, 12

- **Prerequisites:** Successful completion of Physical Education
- **Length:** 40 weeks
- **Credits:** ½

Aerobics

This class introduces the students to aerobics and the benefits of this type of exercise program. Students will have their weight, body fat, and body measurements taken at the beginning of the class and periodically throughout the class. The class will use heart rate monitors as well. Students would also be instructed on how to journal and keep track of their exercising and eating habits. Topics to be covered include introduction to aerobics/floor aerobics, step aerobics, stability ball, yoga/power yoga and Pilates, dance aerobics/line dancing, tae-bo, kickboxing, and interval aerobics. This course will satisfy the physical education credit.

- **Grade:** 9 – 12
- **Prerequisites:** none
- **Length:** 40 weeks
- **Credits:** ½

Health

Health is a required 40-week every other day course or a 20-week daily semester class that students must take during grades 10-12. Health provides an opportunity to help students understand the importance of healthy choices to live a long healthy life. Health encompasses three areas: mental, social, and physical. The emphasis is on health being a matter of individual choices about lifestyles with consequences either positive or negative. The student explores his/her values and the idea of being a responsible, healthy adult where choices can affect the individual, family, friends, and other members of society. The teacher will teach responsibility and respect for self and others throughout the semester.

- **Grade:** 10 – 12
- **Prerequisites:** none
- **Length:** 40 weeks every other day or 20 weeks daily for 1 semester
- **Evaluation:** Homework, projects, tests, and participation
- **Credits:** ½

Personal Fitness

This class is an elective course offered in addition to your traditional Physical Education instruction at Liberty High School. The format is similar to your PE classes and it will occur every other school day. Grading is on a 0-100% system (similar to traditional physical education classes) with emphasis placed on the following:

- attendance (in compliance with LCS attendance policy)
- safety progress (effort and tracking of), Testing (knowledge-based)
- ability to work with others within class confines
- fitness testing (endurance, upper/lower body strength, flexibility)
- resistance/weight (anaerobic) training (proper use/instruction of all weight training exercise equipment)
- proper breathing during each exercise)

- cardiovascular (aerobic) training (proper use/instruction of aerobic training exercise/equipment)
 - strength training vs. endurance (weight loss) training (training for increased muscle mass vs. a lean/tone body; reps/sets/resistance choices; sport-specific training)
 - diet-calories-fat, carbohydrates, protein (maintenance vs. weight gain vs. weight loss diets)
 - human muscular system (skeletal function of muscles and exercise and its effect on these muscles)
 - supplements (are they worth it? cost vs. benefit)
 - anabolic steroids (what are they and what are their medical risks)
 - suggestions from class (we will take the time to research and answer common questions from the students involved in this class)
- **Grades:** 9 – 12
 - **Prerequisites:** none
 - **Length:** 40 weeks
 - **Credits:** ½

Advanced Personal Fitness

This class is an elective college-level course accredited by SUNY Sullivan and offered in addition to your traditional Physical Education instruction at Liberty High School. The format is similar to your PE classes and it will meet every other school day. Grading is on a 0-100% system (similar to traditional physical education classes) with emphasis placed on the following:

- attendance (in compliance with LCS attendance policy)
- safety progress (effort and tracking of), Testing (knowledge-based)
- ability to work with others within class confines
- fitness testing (endurance, upper/lower body strength, flexibility)
- resistance/weight (anaerobic) training (proper use/instruction of all weight training exercise equipment)
- proper breathing during each exercise)
- cardiovascular (aerobic) training (proper use/instruction of aerobic training exercise/equipment)
- strength training vs. endurance (weight loss) training (training for increased muscle mass vs. a lean/tone body; reps/sets/resistance choices; sport-specific training)
- diet-calories-fat, carbohydrates, protein (maintenance vs. weight gain vs. weight loss diets)
- human muscular system (skeletal function of muscles and exercise and its effect on these muscles)
- supplements (are they worth it? cost vs. benefit)
- anabolic steroids (what are they and what are their medical risks)
- suggestions from class (we will take the time to research and answer common questions from the students involved in this class)
- Grades: 11 – 12
- Prerequisites: Personal Fitness
- Length: 40 weeks
- Credits: 1 high school credit and 1 college credit per semester (with tuition payment)

SCIENCE

Living Environment – Biology (Regents)

Classes of middle school and high school Living Environment meet everyday for one period and every other day there is one period of lab. Laboratory work must be successfully completed with evidence in the form of 30 passing lab grades in order to qualify for the Regents examination. Specific course content covers: Evolution; Energy, Matter and Organization; Maintaining a Dynamic Equilibrium; Reproduction, Growth, and Development; Interaction and interdependence.

- **Grade: 9**
- **Prerequisites:** Accelerated students take Living Environment in 8th grade based on teacher recommendations; must have a MINIMUM of a 90% average in Science in 7th grade and **must be** enrolled in Accelerated Math and have Star Score Math At/Above Benchmark \geq 40PR; Star Score ELA At/Above Benchmark \geq 40PR
- **Length:** 40 weeks
- **Final Evaluation:** Regents
- **Credits:** 1 HS

Conceptual Biology

This is a special class in science that covers topics from Earth Science: space, our solar system and the Earth and moon, as well as topics from Biology: ecology, cycling of matter, the flow of energy in an ecosystem, relationships in an ecosystem. Biology topics will be based on New York State landforms, plants and animals. An emphasis will also be placed on reading relevant articles to enhance our scientific knowledge.

- **Grade:** 9 -10
- **Prerequisites:** none
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative test or project
- **Credit:** 1

Earth Science (Regents)

Classes of high school Earth Science meet every day for one period and every other day there is one period of lab. Specific course content covers the four major branches of Earth Science: astronomy, geology, oceanography and meteorology. Within these major branches, some sub-topics covered include earth's motions, energy and its exchange in the atmosphere, rock formation, geologic history, water and climate, landscape development, and environmental change.

- **Grade:** 9 for accelerated MS students, 10
- **Prerequisites:** Successful completion of Living Environment
- **Length:** 40 weeks
- **Final Evaluation:** Regents
- **Credits:** 1

Honors Earth Science (Regents)

Classes of high school Earth Science meet every day for one period and every other day there is one period of lab. Specific course content covers the four major branches of Earth Science: astronomy,

geology, oceanography and meteorology. Within these major branches, some sub-topics covered include earth's motions, energy and its exchange in the atmosphere, rock formation, geologic history, water and climate, landscape development, and environmental change.

- **Grade:** 9 for accelerated MS students, 10
- **Prerequisites:** Successful completion of 8th grade Accelerated Living Environment; teacher recommendations; must have a MINIMUM of a 90% average in Science in 8th grade Accelerated Living Environment and must be enrolled in Accelerated Math
- based on work ethic, absenteeism, behavior
- **Length:** 40 weeks
- **Final Evaluation:** Regents
- **Credits:** 1

Chemistry (Regents)

This course meets five days per week for one period with a lab period every other day. Chemistry is the study of matter, the changes in matter, and the mechanics of chemical change. Topics include, but are not limited to, atomic structure, bonding, the periodic table, radiochemistry, organic chemistry, oxidation-reduction, and kinetics. Chemistry includes a laboratory requirement and submission of lab reports to qualify for the final examination. We strongly recommend this course for college bound students.

- **Grade:** 10/11
- **Prerequisites:** successful completion of Regents' Living Environment and Earth Science or 1 other science credit
- **Length:** 40 weeks
- **Final Evaluation:** Chemistry Regents Exam
- **Credit:** 1

Physics (Regents)

This course includes the study of the broad concepts involved in the fields of Mechanics, Waves, Electricity and Atomic Theory with special emphasis on the energy exchanges that occur in each area. There is a mandatory laboratory requirement of at least two periods per week spent doing experiments and the submission of a formal report for each experiment. Labs must be successfully completed in order to take the Regents examination. This course is strongly recommended for college-bound students.

- **Grade:** 11 and 12
- **Length:** 40 weeks
- **Prerequisites:** successful completion Regents level Chemistry and/or SUPA Chemistry
- **Final Evaluation:** Regents
- **Credits:** 1

Environmental Science

Environmental Science is the branch of science concerned with the relations between organisms and their environment. Major topics that are included in the course are, studying Earth, weather, as well as

the forces that affect it. Biomes, ecological interactions, Evolution, Zoology, Botany/ Dendrology, Forestry, classification and identification, Taxonomy, Aquatic Resources and studies, environmental careers, human impact-as well as resource management.

The class is designed to expose the student to various environmental science fields, through hands-on experimentation, research, writing, reading, and use of the Internet. The course allows students to develop skills of observation and helps to hone abilities of data interpretation and judgment of information sources. The course allows for the opportunity to meet with professionals in various environmental fields, and allows the students to design and conduct independent research.

- **Grade:** 11 and 12
- **Prerequisites:** successful completion of Living Environment or Earth Science
- **Length:** 40 weeks
- **Final Evaluation:** Local Final
- **Credits:** 1

Physics of Toys

Students of science should do more than memorize definitions and formulas. To make sense of science, students must be given opportunities to make connections between scientific phenomena and their own world. This class delves into the mysteries of such toys as the Push-n-Go, bottle rockets, paper airplanes, 'Operation', and Mousetrap. The students will experience the minds-on, hands-on learning that will improve their problem-solving skills while also improving their science content knowledge.

- **Grade:** 11 and 12
- **Length:** 20 weeks
- **Prerequisites:** Successful completion of at least one lab science credit
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

Forensics

Forensic science is a multidisciplinary science, which includes concepts in many areas including biology, chemistry, zoology, anatomy, genetics, physics, math and statistics, earth science, sociology, psychology, and communications. Topics for this half-year course may include: types of evidence, evidence collection, fingerprints, and impressions, DNA evidence, blood and blood spatter, drug testing, handwriting analysis, muscle and bone analysis, and time of death. Students may not enroll in Forensics if they enroll in the Public Safety program at SC BOCES due to an overlap in curriculum.

Class requirements:

1. Students must maintain a notebook, which will include all tests, quizzes, labs, complete notes, homework and any additional information, in chronological order.
2. Each student must present to the class two major projects. Most work will be done independently. Computer access is necessary.
3. Students must have the ability to work independently as well as within groups.

- **Grades:** 11 – 12
- **Prerequisites:** Successful completion of at least one lab science credit

- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test/Project
- **Credits:** ½

General Biology I & II - Syracuse University Project Advance (SUPA)

This is a full year (two-semester), eight-credit college course offered through Syracuse University. This course meets five days per week for one period with a lab period every other day. The course teaches modern biological concepts, including classification of organisms, ecology, human influences on natural ecosystems, microscopy, cells, organic and inorganic chemistry, animal development, genetics, energy, and plant structure and function. During a session, the student may be asked to carry out an experiment, view a demonstration, interpret experimental results, make a drawing to document observations, and so on.

- **Grade:** 11 and 12
- **Prerequisites:** Successful completion of Living Environment or Earth Science, and Chemistry (Regents)
- * Students are strongly encouraged to take Physics whenever possible. This can be before SUPA Biology, or can be taken concurrently with SUPA Biology, with the permission of the Science Facilitator.
- **Length:** 40 weeks
- **Final Evaluation:** College final
- **Credit:** 1 high school and 8 college credits per semester/course (with tuition payment)

General Chemistry I & II - Syracuse University Project Advance (SUPA) (Not offered 2024-2025)

This is a full year (two-semester), eight-credit college course offered through Syracuse University. This course meets five days per week for one period with a lab period every other day. Chemistry is the study of matter, the changes in matter, and the mechanics of chemical change. This course investigates forms of energy, atomic structure, quantum theory, periodic law, molecular geometry, properties of liquids and gasses, and more. The second semester will more deeply explore the dynamic processes that make up the organic and inorganic world. Topics include chemical reactions, chemical equilibrium, thermochemistry and thermodynamics, electrochemistry, voltaic cells, nuclear chemistry, organic chemistry, and polymers.

- **Grade:** 10, 11, and 12
- **Prerequisites:** Successful completion of Living Environment or Earth Science, and Chemistry (Regents)
- **Length:** 40 weeks
- **Final Evaluation:** College final and Chemistry regents if not already passed
- **Credit:** 1 high school and 8 college credits per semester/course (with tuition payment)

SOCIAL STUDIES

Global History and Geography – 9 and 9H

The first part of a two-year study of Global History and Geography contains five units of study. The first unit focuses on an introduction to the methods of social sciences: history, geography, economics,

political science and culture. The second unit covers the period from Early Man (4000 BC) to the end of the Classical Civilizations (500 AD). It includes the rise and fall of Great Empires and the emergence and spread of belief systems: Animism, Hinduism, Buddhism, Chinese philosophies, Judaism, Christianity, and Islam. The third unit focuses on Expanding Zones of Change and Encounter (500 AD to 1200 AD). The next unit explores the Global Interactions that include Japan, China, and the emerging European countries. The final unit of study introduces the First Global Age (1450 to 1770), which concentrates on the rise of Meso-American Empires and the encounter between people of the Americas, Africa, and Asia.

- **Grade:** 9
- **Prerequisites:** successful completion of 8th grade social studies; placement in Honors based on 8th grade performance and teacher recommendation. In order to receive a recommendation for an Honors-level course, the student must have a 90 average.
- **Length:** 40 weeks
- **Final Evaluation:** Cumulative Test
- **Credits:** 1

Global History and Geography – 10 and 10H

The second part of a two-year study of Global History and Geography begins with the Age of Revolution (1750 to 1914), which includes the Scientific Revolution, Enlightenment, and the Political, Social, and Economic Revolutions. The next unit covers the Crisis and Achievement of the Global World (1900 to 1945). This unit explores the impact of technology, and the causes and effects of the major World Wars. The third unit presents the 20th century since 1945. The last unit of study focuses on Global Connections and Interactions: economic trends, modernization, urbanization, global migration, science and technology, the environment, poverty, international terrorism, women’s emerging role and human rights. Students are required to pass a Regents examination in June in order to meet graduation requirements.

- **Grade:** 10
- **Length:** 40 weeks
- **Prerequisites:** successful completion of 9th grade social studies; students in Honors must be in 9H and must maintain an 85 average. In order to receive a recommendation for an Honors-level course, the student must have a 90 average in a Regents-level course or 85 in an Honors-level course.
- **Final Evaluation:** Cumulative Test
- **Credits:** 1

United States History and Government – 11

The history of the United States is the history of a great experiment in democracy. The basic principles set down by the Declaration of Independence became the guiding ideals underlying the nation’s development. Our history has encompassed a continual search for ways in which to apply these principles. The United States Constitution was a major step toward codifying the principles, but as the history of our country clearly shows, the document represented only the first step in achieving “justice and equality for all”.

The 11th grade U.S. History and Government course is a one-year course. This syllabus divides

American history into six general areas. It attempts to relate the past events with the present and future civic lives of the students. The basic social science tools such as the historical method, simple economic analysis, and a study of the political and social institutions are employed. Concepts and understandings are built upon those developed in previous grades.

The student will examine major issues in a depth consistent with their backgrounds and intellectual capacities. This course should help to deepen their respect for the fundamental American values of respect for the individual regardless of one's background, equality before the law, belief in a government of laws (not of men), and the obligation of all for responsible participation as citizens in the community and nation.

The six general areas are: Constitutional Foundations (Colonial Era to 1865), United States Industrialization (1865 to 1900), The Progressive Movement (1900 to 1920), Prosperity and Depression (1917 to 1940), The U.S. in an Age of Global Crises (1933 to 1960), and A World in Uncertain Times (1960 to the present). Students are required to pass a Regents examination given in June in order to meet requirements for graduation.

- **Grade:** 11
- **Length:** 40 weeks
- **Final Evaluation:** US History Regents
- **Credit:** 1

United States History and Government I and II - SUNY Sullivan (SCCC)

This course is designed to provide a college-level experience and preparation for the NYS Regents Exam in June. This course will be divided into two semesters, American History I and American History II with each semester will be worth 3 credits from SUNY Sullivan. An emphasis is placed on interpreting documents, mastering a significant body of factual information, and writing essays. Topics include colonial America, revolutionary ideology, constitutional development, Jeffersonian and Jacksonian democracy, nineteenth-century reform movements, and Manifest Destiny. Other topics include the Civil War and Reconstruction, immigration, industrialism, Populism, Progressivism, World War I, the Jazz Age, the Great Depression, the New Deal, World War II, the Cold War, the post-Cold War era, and the United States at the beginning of the twenty-first century. This course will fulfill the United States history graduation requirement.

In addition to the topics listed above, the course will emphasize a series of key themes throughout the year. The themes will include discussions of American diversity, the development of a unique American identity, the evolution of American culture, demographic changes over the course of America's history, economic trends and transformations, environmental issues, the development of political institutions and the components of citizenship, social reform movements, the role of religion in the making of the United States and its impact in a multicultural society, the history of slavery and its legacies, war and diplomacy, and finally, the place of the United States in an increasingly global arena. The course will trace these themes throughout the year, emphasizing the ways in which they are interconnected and examining the ways in which each helps to shape the changes over time that are so important to understanding United States history.

Through this course, students will be provided with content, practical knowledge of U.S. history, practice in critical thinking activities, and experience in effective writing techniques that will better

prepare them for not only the NYS Regents Exam but also their future education. This will be a rigorous course, but it will also be enjoyable. Hard work and dedication will be essential to success.

- **Grade:** 11
- **Prerequisites:** Successful completion of 10th grade social studies
- **Length:** 20 weeks each course
- **Final Evaluation:** Cumulative College Final per semester, Term Paper per semester, and US History Regents
- **Credits:** 1 high school and 3 college credits per semester/course (with tuition payment)

Economics and Economic Decision Making – 12 and 12H

This one-semester course is designed to provide students with the economic knowledge and skills that will enable them to function as informed and economically literate citizens in our society and in the world. Emphasis is given to rational decision-making rather than consumer education, although this emphasis will encourage students to become wiser consumers as well as better citizens.

Upon completion of the course, students should be able to demonstrate an understanding of basic economic concepts such as scarcity, supply and demand, markets, productivity, opportunity cost, specialization, productive resources, interdependence, growth and economic systems. Students will also come to understand the operation of the economic system of the United States. Instruction will include discussing the roles of various components of American economic systems, the interdependence of the world economies, the political and social impact of economic decisions, and the economic impact of political and social decisions.

The units in economics include the following: Introduction to Economic Systems, Elements of the Economy (Microeconomics), Bringing Economic Systems Together (Macroeconomics), The United States, and The World Economy.

- **Grade:** 12
- **Prerequisites:** successful completion of 11th grade social studies; placement in Honors based upon 11th grade performance and teacher recommendation
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test
- **Credits:** ½

Participation in Government – 12

The primary purpose of this one-semester course is to facilitate and encourage the development of civic-minded individuals capable of effectively fulfilling the office of ‘citizen’, which is a fundamental precept of democracy and right guaranteed by the Constitution.

The course poses challenges to each student:

- acceptance of responsibility for active involvement in determining and delineating issues to be explored
- pursuit of information needed to define, analyze, and develop resolutions to each issue
- the carrying out of activities that support the resolution of each issue
- the drawing together of relevant information, skills, and understandings from past educational

and/or life experiences, and

- focusing these on the resolution of real issues

Students must also assume the role of citizen as it applies to the program by accepting the responsibility for involvement and successful fulfillment of the tasks. Success in the course is contingent upon successful completion of a mandated set of 15 hours, which encompasses 20% of the students final average.

Units of study include: Purposes of Government; the U.S. Constitution; Political Protest; Elections and Campaigns; Party Patterns and Voter Behavior; Political Spectrum and Ideology; Public Opinion, Mass Media and Propaganda; Interest Groups, Public Policy and the Budget Process, the Judicial System, Selected Amendments, and Supreme Court Cases.

- **Grade:** 12
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative Test
- **Credits:** ½

Political Science - SUNY Sullivan (SCCC)

This course is designed to be an introduction to the American government, its historical foundations, institutions and political processes. The purpose of this class is to teach you about the institutions, practices, and history of politics and government in the United States. This course will cover a great deal of ground, as we will discuss the Constitution, the three branches of the federal government, interest groups, public opinion, campaigns, elections, and parties. For each subject, we will examine some of the leading perspectives in political science, and we will incorporate current events and our personal experiences, as well.

- **Grade:** 12
- **Prerequisites:** Successful completion of 11th grade social studies
- **Length:** 20 weeks
- **Final Evaluation:** Cumulative College Test or Project
- **Credits:** ½ high school and 3 college credits

TECHNOLOGY

Materials Processing

This course focuses on the classifying, properties, and processes of materials and the selection of those materials to be used in applications. Learners should be concerned with processes and materials used in metals, woods, plastics, ceramics, and composites. This course demonstrates unchanging processes used on different materials, as well as specific processes used on certain materials. This course also offers selection process of the use of materials in different applications. Special attention is given to safety in the workshop environment. Major activities include hands-on projects, minor hands-on projects, and safe techniques used to process materials.

- **Grade:** 9 – 10
- **Prerequisites:** None

- **Length:** 20 weeks
- **Final Evaluation:** test, portfolio
- **Credits:** ½

Production Systems

Almost everything we use today is manufactured on some sort of production line. Throughout this course, the understanding of manufacturing will constantly be learned. Things such as the inputs, processes, outputs, feedback, and goals will be what this course is based around. The designing of a product and the key elements preceding the actual building of the product, are very important steps that need to be learned in detail. Once the designing of the product is completed, the students will have a large hands-on production project to complete. The outcome of the course, in addition to hands-on experience, will bring knowledge about how factories and industries work and will help in bringing that knowledge back into the classroom to make a small-scale manufacturing facility.

- **Grades:** 9 – 12
- **Prerequisites:** Material Processing
- **Length:** 20 weeks
- **Final Evaluation:** test, portfolio
- **Credits:** ½

Computer Aided Design

This course will expose the student to the current means of generating graphic designs with computers. The student will become familiar with computer terminology, history, components, applications, and design functions. This course will also review and discuss CAD/CAM. The majority of the time will cover and familiarize the student with the CAD system and solving graphic problems with the system through hands-on class work. The teacher will also assign a major design project.

- **Grade:** 10 – 12
- **Prerequisites:** successful completion of Design and Drawing for Production
- **Length:** 40 weeks
- **Final Evaluation:** test, portfolio
- **Credits:** 1

Design and Drawing for Production

Design drawing for Production encourages visual and mechanical problem solving using common graphical language to describe forms in society. Through exercises developed within learning activities, the student is provided with opportunities to experience critical thinking, problem solving and decision making. The student will also be able to acquire Technical Drawing skills and experience creative design techniques. Recognizing the values, differences and importance of the individual learners, this course curriculum provides experiences for the student to function as a more skillful and knowledgeable citizen in his/her employment, community, environment, family and self. Drawing types explored include: engineering, perspective and sketching. Concepts covered in DDP are the design process, design principles, design styles, structural engineering and architecture.

This course may be used to fulfill the Art/Music graduation requirement.

- **Grade:** 9 – 12
- **Prerequisites:** None
- **Length:** 40 weeks
- **Final Evaluation:** test, portfolio
- **Credits:** 1

Architectural Drawing

This course explores the theory of architectural design through past civilizations. The students will be able to identify architectural construction by the knowledge of certain historical periods throughout the years of civilization. Students will be required to develop a working knowledge of how to finance and construct a home using today's technological advances in the construction field. Students will submit a complete set of working plans from which they will build a 1/4" scale presentation model.

- **Grade:** 10 – 12
- **Prerequisites:** Successful completion of Design and Drawing for Production
- **Length:** 40 weeks
- **Final Evaluation:** test, portfolio
- **Credits:** 1

Principles of Engineering (Emphasizing Mathematics, Science, and Technology) (Not offered 2024-2025)

Principles of Engineering is an exploratory learning experience. Instead of merely showing a student how to use a technology, it lets them dissect that technology to get a better understanding of how it works. Through problem solving, the student will take their found knowledge and not only use, but often improve upon technology. In order to achieve this goal, students must explore materials and their properties, the design process, and testing strategies that will use concepts from both mathematics and physics. Students must also experiment with the different engineering systems, such as fluid, electrical, and mechanical. With completion of this course, students will be capable of applying its concepts to the everyday world and any career choice.

- **Grade:** 11 – 12
- **Prerequisites:** Successful completion of Design and Drawing for Production
- **Length:** 40 weeks
- **Final Evaluation:** test, project, portfolio
- **Credits:** 1

Creativity and Innovation

This course will encourage the solution of technical problems using unconventional approaches. Given a defined supply of materials, students will use laboratory facilities in order to optimize a solution to stated technical problems. Topics include Methods of approaching Creativity and Innovation, Developmental Factors of Creativity and Innovation, and Cultural Impacts of Creativity and Innovation. Many of our projects are used for Science Olympiad

- **Grade:** 10 – 12
- **Prerequisites:** successful completion of Materials Processing or permission of instructor

- **Length:** 20 weeks
- **Final Evaluation:** test, project
- **Credits:** 1/2

Transportation Systems

Transportation systems is a course that will acquaint students with a range of methods used to move people, materials, and products, across the land, sea and air. The study of these systems will be the main focus of the course. The theory of operation and the scientific principles of the transportation systems will be included. Lab activities will include construction of model cars, planes, rockets, and boats. Students may also experiment with internal combustion engines that are used to power our transportation systems. Transportation systems, and the technology that is involved with them, is rapidly changing. These systems play an immeasurable role in the lives of students and citizens in the modern world. These systems right down to how the students arrived at school today affects every aspect of our lives. Knowing and understanding these systems will give students a real advantage in a world that revolves around transportation.

- **Grades:** 9 – 12
- **Prerequisites:** successful completion of Materials Processing or permission of instructor
- **Length:** 20 weeks
- **Final Evaluation:** test, project
- **Credits:** 1/2