

Charter High School for Applied Technologies



Where Every Day is Career Day!

Curriculum Handbook and Course Catalog 2019-2020

The Charter School for Applied Technologies prepares students to attain family-sustaining careers by integrating career exploration and a lifelong learning culture.

SECTION 1: STUDENT SERVICES AND INFORMATION

Career & Counseling Center

The Charter High School for Applied Technologies Career & Counseling Center works with the school community to help students maximize their high school experience. The primary function of the guidance department is to assist students in making the decisions, which affect their education, and to implement programs that will aid them in reaching their full potential at this school. It is the department's goal to provide students at all levels with appropriate academic advising, to supply them with the college and career information necessary for effective decision making, and to provide personal counseling as it relates to school performance. The Career and Counseling Center coordinates a number of programs available to all students and their parents, including support groups, parent-teacher conferences, career awareness programs, college applications and scholarship information, student orientations, academic counseling, and course scheduling.

PERSONAL/SOCIAL DEVELOPMENT

Adolescence can be an exciting time for new experiences. It can also be a time of stress and challenge both at school and at home. CHSAT offers a variety of resources to help students during this unique period. School Counselors are available to meet with students on an individual basis. In addition, student support groups are offered focusing on a variety of issues/concerns such as self-esteem, anger management, stress management, study skills, and teen issues.

ACADEMIC COUNSELING

Counselors work with all students to write, review, and revise individual academic plans. Counselors are also available to discuss four-year plans, course selection, and post-secondary goals with students and parents. Parents can track student academic progress by reviewing mid-quarter progress reports and quarterly report cards with their child.

CAREER GUIDANCE

Selecting a college and career can be a confusing and exciting experience. The Career Counseling Center assists students with college selection, career exploration, pre-college testing, admissions, financial aid, and scholarship information. In addition, the Career and Counseling Center provides a variety of references, electronic resources and applications available to students, parents, and teachers.

Counselor Contact Information

We would be happy to discuss the curriculum, graduation requirements, etc. with you and your child if needed. Please feel free to contact us anytime!

Counselor Assignments (by last name) and Extensions:

David Musielak (A-F) x3123 Kari Piazza (G-M) x3125 Sarah Monaco (N-Z) x3127

Richard Diaz (School Social Worker) x3118 Lindsey Dust (Director of Student Services) x4125

School to Career Programming

Career Touches: A career-oriented experience based primarily on alignment to curriculum that can be conducted on and/or off site. On site career touches involve guest professionals presenting career information to students through classroom visits, grade level/subject matter presentations and/or whole school assemblies. Off-site career touches engage students in visits to a wide variety of businesses. At these visits, students receive information and a brief exposure to all the different careers that exist at each individual business establishment. Career touches are appropriate for grades K-12. For grades K-6 career touches are encouraged to be designed as hands-on, interactive experiences that foster student thinking and questioning but with little to no lecture included. For grades 8-12 career touches are encouraged to be designed as hands-on, interactive experiences that include dialogue between presenters and students with some lecture/oral presentation by professionals.

Career Exploration: A career-oriented investigation and discovery based primarily on student interest that can be conducted on and/or off site. On site career explorations involve guest professionals presenting specific job information to select focus groups of students (approximately 10-15) where students are able to delve into and make connections to subject matter, skill level and individual interests. Off site career explorations engage select focus groups of students (approximately 10-15) in specially designed visits to distinct places of work where they can delve into and make connections to subject matter, skill level and individual interests. Career explorations will expose students to thorough studies of specific careers that they have shown an interest in learning about in an effort to continually educate them so that they are empowered to make decisions concerning their future career choice(s). Career explorations are appropriate for grades 8-12.

Job Shadows: A career-focused, one-day visit to a specific job site that is based exclusively on student interest, individual skill and knowledge level. All job shadowing is done off site. Job shadowing involves either a select small group (no more than 4) and/or individual students being matched to a specific business professional for a thorough analysis of and participation in that individual's work. Students will follow that professional throughout their workday observing and dialoguing with them about the work they perform and what necessary skills, talents and knowledge are required to successfully fulfill their job responsibilities. Students may also engage in hands-on tasks and experiences related to that specific job while they are under the supervision and guidance of their shadower. Job shadowing is appropriate for grades 9-11.

Career Exploration Internship Program (CEIP): The Career Exploration Internship Program (CEIP) assists students with understanding, the linkages between school and work. Through CEIP students explore and learn about a variety of career options, through a non-paid worksite experience, in a career cluster of interest.

The CEIP partnership between education and business is only offered to Seniors, as a follow up to Career Touches & underclassmen Job Shadows, Career Exploration, etc. The CEIP offers an individual opportunity to learn, firsthand, about the skill and educational requirements necessary for career areas in which the students believe they are interested in pursuing. This, in turn, allows students to play an integral part in designing their own high school program and in choosing courses they should take to reach their career objective. Through this partnership, educators and employers alike realize the importance of providing relevant learning experiences and share the critical task of helping students develop self-direction and decision-making skills.

The program will be offered for a 1/2 credit or one full high school credit applicable towards graduation requirements.

Components of the program are:

- 1/2 credit – 54 hours (work site) of non-paid internship
 - 26 hours of in school supporting instruction
- 1 full credit - 108 hours (work site) of non-paid internship
 - 54 hours of in school supporting instruction
- The student must rotate through 4 different job stations throughout the term of the Internship.
 - 1/2 credit – 54 hours: 13.5 hours per station
 - 1 full credit – 108 hours: 27 hours per station
- Internship Weekly Journals - Students must keep a weekly journal of onsite internship activities. The school must retain student journals for a period of 2 years.
- Internship Time Sheets - Students must record and have mentors sign off on time sheets
- Working papers are required
- Transportation is the student/parent responsibility. CSAT will not provide transportation as part of the CEIP

Family Support Center

Located at 317 Vulcan Street, Buffalo, NY 14207, the Family Support Center at CSAT has been created to strengthen its students and families through school, community and parent collaboration in order to promote student success and well-being. It has also become home to the Transportation and Enrollment Offices and for uniform purchases. Below is some information and frequently asked questions about the Family Support Center and its benefits:

Services Provided: The center's goal is to foster family communication and well-being, healthy youth development and success in school. In order to accomplish this, there is a spectrum of services available, including: Individual and family counseling, Support groups, Parenting groups, Referrals and information to outside community resources.

Who can participate? CSAT believes that strong families mean successful students, therefore any K-12 student and their family are not only welcome, but encouraged to participate in the Family Support Center and the services it offers.

Availability and Hours: Hours are **Monday-Friday 7:30 AM-4 PM**. Appointments can also be made after-hours on Tuesday and on Saturdays.

Cost: Every aspect offered is free and confidential. The center is here to assist in a positive and cost-free environment to ensure the success of its clients.

Contact Information: Sarah Rohde (Social Worker) srohde@csat-k12.org or call 871-7400 ext. 4106.

Working Papers

Student working papers are issued during regular school hours every day through the High School Career and Counseling Center. Working paper applications are also online at www.labor.state.ny.us.

Steps to acquiring working papers:

1. Obtain a working paper application from Ms. Owens in the Career and Counseling Center OR online.
2. Part I needs to be filled out COMPLETELY and signed by a parent/guardian.
3. Obtain a copy of your child's last physical for Part III of the application. The physical must state that the student is physically fit for employment and be within the last year. If your child had a physical at school, our school nurse can verify the information.
4. Return the application and physical to Ms. Owens in the Career and Counseling Center. We will complete Part IV (Schooling Record) and issue working papers to your child when they are completed.
5. Working papers usually take about 1 business day to be processed. We will distribute working papers (blue or green cards) to students as they are issued.

College Visits

For students to have the best chance of academic success, they must be in class as much as possible. Seniors who are interested in college are always encouraged to attend college open houses and make other visits to colleges they are considering attending. However, we strongly encourage students to try to schedule such visits on weekends or during breaks so as to miss as little instruction time as possible.

Students planning to visit colleges must adhere to the following procedures for their school absence to be considered excused.

1. Students are allowed to miss only three days of school to make college visits.
2. A student making such a visit should have made a prior appointment at the college. He or she should not just arrive on campus and plan to look around, as this is something that could be accomplished on a weekend.
3. A student who is making a college visit must return to school the next day with a note on college stationary, from a college representative verifying that the student did have a meeting and/or tour scheduled.

Information for Student Athletes

The National Collegiate Athletic Association (NCAA), an organization founded in 1906 that has established rules on eligibility, recruiting, and financial aid, regulates many college athletic programs. The NCAA has three membership divisions—Division I, Division II, and Division III. Institutions are members of one or another division according to the size and scope of their athletic programs and whether they provide athletic scholarships. If a student plans to enroll in college as a freshman and you wish to participate in Division I or Division II athletics, they must be certified by the NCAA Initial-Eligibility Center. The Eligibility Center was established as a separate organization by the NCAA member institutions in January 1993. It ensures consistent interpretation of NCAA initial-eligibility requirements for all prospective student athletes at all member institutions.

Responsibility as a Prospective Student Athlete:

- It is the students' responsibility to make sure the Eligibility Center has the documents it needs to certify them. These documents are: 1. Completed and signed Student Release Form and fee 2. An official transcript from every high school they have attended 3. ACT or SAT scores.

When to Start the Process:

- Students who wish to participate in Division I or Division II athletics, should plan to start the certification process early—usually the beginning of the junior year in high school. They must meet certain course requirements including successfully completing a core curriculum of at least 13 academic courses in the following categories: English, Mathematics, Social Studies, and Science. A student must also meet minimum requirements for GPA and SAT, ACT test scores. Students should obtain a copy of the NCAA Guide for the College Bound Student-Athlete in the Career Counseling Center.

SECTION 2: GRADUATION REQUIREMENTS AND GRADING

Both the New York State Board of Regents and the local Board of Education of the Charter School for Applied Technologies may issue diplomas to students who complete specific courses of study. Parents and students are urged to carefully read the information on the tables below and to become thoroughly familiar with what is required for a student to receive his/her diploma. ***Students are reminded that requirements for a diploma apply to students depending upon the year in which they first enter ninth grade.*** A student who takes more than four years to earn a diploma is subject to the requirements that apply to the year that the student first entered ninth grade.

NEW YORK STATE GRADUATION REQUIREMENTS FOR STUDENTS ENTERING GRADE 9 IN SEPTEMBER 2011 AND THEREAFTER REGENTS DIPLOMA OR WITH ADVANCED DESIGNATION

Required Subjects	Units (credits)	Required Exams	Required Subjects	Units (credits)	Required Exams
English	4	Regents ELA	English	4	Regents ELA
Social Studies	4	Regents US History AND Regents Global History ++	Social Studies	4	Regents US History AND Regents Global History ++
Mathematics	3	1 Sequential Math Regents Exam	Mathematics	3	Regents Algebra 1, Geometry, and Algebra 2/Trigonometry
Science	3	1 Science Regents Exam	Science	3	1 Regents, Life Science, 1 Regents, Physical Science
Health	0.5	None	Health	0.5	None
Fine Arts	1	None	Fine Arts	1	None
World Language	1	None	World Language	1*	Checkpoint B Regional Exam*
Physical Education (0.5 unit each year)	2	None	Physical Education (0.5 unit each year)	2	None
Electives	3.5	None	Electives	3.5	None
TOTAL	22	5 Exams	TOTAL	22	8 + World Language Checkpoint B Exam

**Five credits of art, music, business or technical education can be used in place of World Languages for the Advanced Regents Designation*

++ 4 + 1 Graduation Pathway Pathway Assessment Options: All students must pass the following 4 required Regents exams or the corresponding Department approved alternative examination found at <http://www.p12.nysed.gov/assessment/hsgen/archive/list.pdf>: 1 Mathematics Regents exam, 1 Science Regents exam, 1 Social Studies Regents exam, and the English Language Arts Regents exam. In addition all students must choose 1 of the following assessments:

- Additional Mathematics Regents exam in a different course; or
- Additional Science Regents exam in a different course; or
- Additional Social Studies Regents exam in a different course

NEW YORK STATE DIPLOMA OPTIONS

DIPLOMA TYPE	AVAILABLE TO	LINK TO FULL INFORMATION
Regents*	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regentsdiploma
Regents with Advanced Designation *	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regentsAD
Mastery in Science	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regentsAD
Mastery in Math	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regentsAD
Mastery in Science and Math	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#diplomaHonors
Regents Diploma (through appeal)	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regpasscore
Local Diploma (through appeal)	All Students	http://www.p12.nysed.gov/part100/pages/1005.html#regpasscore
Local Diploma	Students with a disability and an Individualized Education Plan (IEP) or 504 Plan	http://www.p12.nysed.gov/part100/pages/1005.html#assessment http://www.p12.nysed.gov/specialed/publications/safetynetcompensatoryoption.html

*Honors Designation for students averaging 90 or higher on required Regents Exams

NEW YORK STATE NON-DIPLOMA EXIT CREDENTIAL OPTIONS

CREDENTIAL TYPE	AVAILABLE TO	LINK TO FULL INFORMATION
Career Development and Occupational Studies Commencement Credential	Students with disabilities other than those assessed using the NYS Alternate Assessment	http://www.p12.nysed.gov/specialed/publications/SACCMemo.htm
Skills and Achievement Commencement Credential	Students with severe disabilities that are assessed using the NYS Alternate Assessment	http://www.p12.nysed.gov/part100/pages/1006.html

Promotional Policy

Minimum units of credit required for promotion from:

Grade 9-5.5 units

Grade 10-11.0 units

Grade 11-16.5 units

Grade 12-22.0 units

Students must make sufficient progress on Regents exams comparable to their cohort.

Transfer Policy: Students transferring to CHSAT will have their transcripts evaluated by counselors and with the principal's approval will be given comparable credit based on courses taken and NYS Regents exam benchmarks.

Community Service

In an effort to involve the students in the community and develop character associated with public service initiatives, **CHSAT requires students to complete 40 hours of community service during the course of their high school experience in order to graduate.** Students are required to present official documentation from the coordinator of any community service activity to their school counselor in order to compile the hours required. CHSAT feels this is a positive way to get students involved in the community and encourages parents and guardians to participate with his or her student(s). Students should contact their school counselor with any questions or comments about fulfilling this requirement.

Challenging of Exams (NYS Regulation)

A student may earn credit for a course of study without enrolling in that course (up to a maximum of 6 1/2 credits) if:

1. The student has met with his/her school counselor by October 1 for a 1st semester or full year course and by March 1 for a 2nd semester course.
2. The student's past academic performance record demonstrates that the student will benefit by exercising this alternative. This will be determined by the building principal.
3. The student must earn a score of at least 85% on a Regents exam or local exam that has been approved by the State.
4. It is the belief of CHSAT that valuable experience occurs in the classroom setting. However, in unusual or extenuating circumstances, the challenging of exams may occur.

Requests for Accelerated Graduation

New York State high school curriculum and graduation requirements are designed to be completed over the course of 4 years of high school. Therefore, it is not recommended that any student graduate early unless there is a legitimate circumstance which would make it appropriate.

Any student who wishes to graduate early must take the following steps:

1. Express interest or intent to his/her counselor *before April 1st of his/her sophomore year, and the reason why he/she feels that it is necessary.* At that point, the counselor will complete a transcript review to determine if this is a feasible option, pending the student passes all required courses and stays on track for the remainder of his/her 10th grade year. The student and counselor will then complete an early graduation request form together, which must be signed by a parent/guardian and returned within 2 weeks of the meeting.
2. Upon receiving a signed request, the counselor will then review the request with the principal and make parent contact to make sure that the request is supported by both administration and the student's parent/guardian(s).
3. The student must then schedule an appointment with his/her counselor to plan his/her courses for junior/senior year.
4. If after 1st semester of the student's third year of high school he/she is on track and in good academic standing, he/she will be promoted to 12th grade for the remainder of the school year.

NOTE: Students who plan to graduate early are eligible to participate in all senior activities and privileges.

Report of Grades

Students are graded numerically four times during the school year. Report cards will be issued at the end of the 10th, 20th, 30th and 40th week of school. All report cards are mailed directly to the student's home. Report of grades is a summary of achievement for the previous 10 weeks. Sixty-five (65%) is the minimum passing grade. Individual teacher comments will be on the report card. Parents are invited to confer with the school at any time. Passing a Regents exam does not entitle a student to course credit. A student must achieve a final course average of 65% or higher to be awarded course credit.

Progress Reports: A progress report will be mailed at the end of the 5th, 15th, 25th and 35th week of school to inform parents of their son/daughter's progress in school. These reports are designed to make parents aware of their child's academic growth. Parents are invited to confer with a counselor or teacher at any time.

Honor Rolls: *The Honor Roll is based on quarterly averages:*

- High Honor Roll: 95-100
- Honor Roll: 90-94.99
- Merit Roll: 85-89.99

Course Final Average Weighting:

- Regents Courses: Each of the 4 quarterly marking-period final grades comprises 22% (2/9) of the final average. Regents exam scores comprise 12% of the final average (1/9).

- Non-Regents Full Year Courses: Each of the 4 quarterly marking-period final grades comprises 22% of the final average and the final examination comprises 12% of the final average.
- Half Year Courses: Each of the 2 quarterly marking-period final grades comprises 40% of the final average and the final examination comprises 20% of the final average.

Class Rank Reporting:

The rank in class is established by placing students in descending order from highest to lowest according to their grade point average. The rank will be done using a weighted GPA.

- Class rank for college admissions purposes will be run at the end of 6 semesters—or junior year—for all students.
- After the 7th semester, the class rank will be re-run for the top 20 students—including grades for courses in progress—to determine valedictorian, salutatorian, and top 10 ranking.
- Student Transfer Policy: Students who enter the Charter School for Applied Technologies for the first time as transfers must be in attendance prior to the start of their 12th grade year in order to be included in the class rank.
 - NOTE: Students who are excluded from the class rank due to transfer will still be recognized at graduation if applicable (may sit on stage), included in the Merit, Honor, and High Honor Rolls, and have a cumulative average reported.

Grade Appeals:

In very rare cases, a student may feel that the grade that he/she received should be reconsidered based on unique individual circumstances. In such cases, a student may submit a request to appeal a final grade in writing to an administrator for review. This written request should include:

1. The course and grade in question
2. A detailed reason for the grade appeal request
3. A signature of the student's school counselor AND parent/guardian.

Any student that wishes to contest a final average in any course must do so no later than August 1st of the following school year.

SECTION 3: COURSE SELECTION AND COURSE INFORMATION

STEP ONE-Review Curriculum Guide and Course Offerings

While reading through the booklet, students should give special attention to information about graduation requirements and check the prerequisites of courses that interest them. A student should select courses that will help prepare them for their future career goals.

STEP TWO-Orientation of Courses

All students will have the opportunity to become more familiar with all course offerings through a series of grade level orientation programs. Students will be asked to make decisions concerning required and elective courses.

STEP THREE-The Annual Review

The school counselor will send the students a pass for an appointment. During the annual review, the student's academic achievement, career interests, and goal setting will be discussed, the four year plan will be reviewed and adjusted as necessary, and a tentative list of courses will be developed based on teacher/counselor recommendations and student interests.

STEP FOUR-Parent/Guardian Approval

When parents/guardians receive the course selection worksheets at home, they should take time to discuss the courses and how they fit into the student's future plans. If parents/guardians have any questions or wish to make any changes, they should call the counselor. If no contact with a counselor is made, it is assumed that the parents/guardians approve of the proposed courses for next year.

SPECIAL NOTE-Schedule Changes

We no longer have an official add/drop period as of the 2016-2017 school year. Our school's schedule is built during the previous school year based on student course selections. Because of this, the number of seats and sections are already determined and it is very difficult to change schedules to accommodate changes that are not related to course failures and graduation requirements. *We strongly encourage all students to review the course catalog and make informed choices about courses for the upcoming year.*

After course selection is completed with students in classrooms and individually, all requests will be entered into our system each parent will receive a letter stating the courses your child is enrolled in. Any conflicts or changes must be addressed before May 1st of the year. No changes will be permitted over the summer or at the beginning of the year.

Early Release/Late Arrival:

Students that wish to be released from school during study halls to work or for school-community service must apply for approval through the Career Counseling Center. This option is available for seniors only. Early release/late arrival is available to seniors who have a scheduled study hall as their first or last period(s) of the day. A signed contract form must be on file with the office and students must leave the building at their scheduled dismissal time. **Schedules will not be rearranged to accommodate an early release.** In addition, no underclassman will be released early from school due to work obligations. All 9th, 10th and 11th grade students employed during the school year must notify their employer their school day does not end until 3:30 p.m.

Advanced Placement Courses and Articulated Courses for College Credit

The Advanced Placement Program (AP) is a cooperative educational endeavor between secondary schools, the College Board, and colleges and universities. Colleges and universities offer credit, placement, or both to students who can show that they have mastered a course by taking an AP exam.

Advanced Placement courses are rigorous academically, rich in content, and a wonderful challenge for students. We support students who desire the challenge AP courses offer; we also acknowledge that the College Board recommends students take no more than two (2) AP courses at a time, due to the demanding nature of the course load. We want students (with their parents) to make wise choices about their course schedule and balance of activities in their lives.

College and university policies regarding Advanced Placement grades are not consistent. Students seeking college credit through AP are advised to obtain the college's AP policy in writing, or to look for it in the institution's catalog.

NOTE: Students electing to enroll in Advanced Placement courses will be expected to take the appropriate National Advanced Placement Exams. There is a fee required to take these exams. See your school counselor for more information.

Articulation agreements are made between high schools and higher education institutions for students to earn college credit while taking high school courses that are rigorous and comparable to college studies. Students who complete the following courses can receive credit while in high school: Advanced Spanish, Calculus, Pre-Calculus, and Advanced Art.

Courses with Weighted Credit

In an effort to encourage students to pursue rigorous and demanding educational programs, a number of academically challenging courses have been weighted in recognition of the extra effort needed to meet their requirements. Consequently, selected honors level courses are weighted at 1.02% and Advanced Placement/Articulated Courses for College Credit have been weighted at 1.05%.

- Honors Level Classes: Global Studies 2 Honors, Advanced Drawing and Painting, Anatomy and Physiology
- Advanced Placement Courses: AP US History, AP ELA
- Articulated Courses for College Credit: Pre-Calculus, Calculus, Advanced Spanish, Advanced Art

Independent Study

This option is open to students in the 11th and 12th grades who have a desire to pursue an in-depth study, investigation, research project, or learning experience which is not available through regular class work in the courses offered by the school. Only one independent study per subject per school year is available to students. The amount of credit earned for Independent Study is determined by the scope and complexity of the project proposed. Students need to complete the following steps before an Independent Study proposal can be approved:

1. Develop a written proposal for the Independent Study project, which specifies the significant and educational product (e.g., a report, presentation, or project), which will be completed in order to demonstrate mastery of a specified content or body of knowledge.
2. Arrange for a teacher or faculty member to serve as an Independent Study Advisor. This person will be responsible for overseeing and assisting as the student completes the independent study, as well as keeping records on attendance and grades earned.
3. Student needs to complete the **Independent Study Project Contract** (available in the Career Counseling Center); have it signed by their parent/guardian and Independent Study Advisor, and submit it to their school counselor before the beginning of the semester.

***Remember:** All of the steps identified above must be completed before the beginning of the semester in order to receive approval for an independent study project. See your school counselor for more information.

SECTION 4: COURSE CATALOG AND DESCRIPTIONS

SUBJECT/CONTENT AREAS

1. English Language Arts (ELA)
2. Social Studies
3. Mathematics
4. Science
5. Spanish (World Language)
6. Physical Education
7. Business and Information Technology
8. PLTW and Advanced Manufacturing
9. Music
10. Visual Arts
11. Additional Programs

NOTE: Courses marked with an asterisk () may not be offered every year, but are offered based on the number of student requests and instructor availability.

ENGLISH LANGUAGE ARTS (ELA)

ENGLISH 9

Course Type: Required General

Prerequisite: English 8

English 9 emphasizes the development of writing skills as well as introduces students to different genres and styles of literature. Students will analyze and produce various genres of writing including persuasive, literary analysis, narrative and expository. Students will also study a variety of both traditional and modern literature, including novels, drama, short stories, and poetry. A number of different activities will be utilized to develop and improve reading, writing, listening, speaking, and critical thinking skills.

Successful Completion=1.0 Credits

ENGLISH 10

Course Type: Required General

Prerequisite: English 9

In English 10 students will read both classic and modern works of literature, as well as relevant non-fiction. Students will focus on vocabulary development, close reading and analysis of text. Students will continue to develop increasing sophistication in all aspects of language use including vocabulary, development and organization and the use of support in their writing.

Successful Completion=1.0 Credits

ENGLISH 10 HONORS

Course Type: Honors (weighted 1.02)

Prerequisite: Final grade of 90 overall, a 90 or higher on the final exam, plus a teacher recommendation and you must fill out an application form.

This course prepares students for *English 11 Honors*. It will follow much of the same curriculum as ELA 10, but will have higher level written assignments, more rigorous coursework, homework, independent and group work and will focus on developing reading, writing, and critical analysis skills, and preparation for the Common Core Regents exam. This course will also have a research component.

Successful Completion=1.0 Credits

ENGLISH 11

Course Type: Required Regents

Prerequisite: English 10

English 11 completes the preparation of students for the Comprehensive Examination in English. Skills in vocabulary, spelling, grammar and reading comprehension are reviewed and strengthened. Students will delve into American Literature and read a variety of genres from different eras of American history. Composition skills such as the organization and development of a multi-paragraph essay will encompass most of the year. Students will research and write a properly documented essay as a major portion of their grade.

Successful Completion=1.0 Credits

ENGLISH 11 Honors

Course Type: Regents, Honors (weighted 1.02)

Prerequisite: Final grade of 90 or higher in English 10 and teacher recommendation.

This course prepares students for Advanced Placement (AP) Literature and Composition. It will follow much of the same curriculum as ELA 11, but will have higher level written assignments, more rigorous coursework, and will focus on developing reading, writing, and critical analysis skills in preparation for AP English.

Successful Completion=1.0 Credits

ENGLISH 12

Course Type: Required General

Prerequisite: English 11

This course will take you on an epic journey of both reading and writing. Students will explore genres of literature and film, with a focus on both professional and academic writing skills.

Successful Completion=1.0 Credits

AP ENGLISH LITERATURE & COMPOSITION

Course Type: Advanced Placement (weighted 1.05)

Prerequisite: 85% average or better in American Literature; very strong comprehension and writing skills; teacher recommendation.

This course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as the use of figurative language, imagery, symbolism, and tone.

Successful Completion=1.0 Credits

SOCIAL STUDIES

GLOBAL HISTORY & GEOGRAPHY I

Course Type: Required General

Global History and Geography is designed to meet the state syllabus that requires a Regents exam to be passed following completion of Global History and Geography II. This course is taught in a chronological format and covers ancient times to the Age of Absolutism. (BCE-1815)

Successful Completion=1.0 Credits

GLOBAL HISTORY & GEOGRAPHY II/ HONORS GLOBAL HISTORY & GEOGRAPHY II

Course Type: Required Regents

Prerequisite for Honors Global II: A final grade of 90% or better in Global Studies I course and final exam or special permission of the instructor.

This course is designed to continue the work begun in Global History & Geography I. Its emphasis is on the modern era. The course begins with the Age of Revolutions and is organized chronologically. The course ends with the completion of required Global History and Geography II Regents exam.

Successful Completion=1.0 Credits

U.S. HISTORY & GOVERNMENT

Course Type: Required Regents

Prerequisite: Global I and II

This course is designed to meet the requirements of the revised New York State syllabus in U.S. History & Government. A Regents exam in U.S. History & Government will be given following the completion of this course. Current events and their relationship to concepts in U.S. History are included with an emphasis on sharpening the basic skills of reading comprehension, writing, graph interpretation, and map reading.

Successful Completion=1.0 Credits

AP U.S. HISTORY & GOVERNMENT

Course Type: Advanced Placement (Weighted 1.05)

Prerequisite: A final grade of 90% or better in Global Studies 10 and Regents exam or special permission of the instructor.

This is a college level course in United States History designed to prepare students for the examination given in May for the college AP credit. The course will emphasize lecture and note taking. Students will also be responsible for college level readings and college level papers. Successful completion of this course may release students from their college freshman American History requirements. Students may take this course in place of U.S. History & Government provided the student takes the Regents examination and passes it. If the course is taken in addition to U.S. History & Government the student may use the course as a fifth unit of credit toward a Social Studies sequence.

Successful Completion=1.0 Credits

PARTICIPATION IN GOVERNMENT

Course Type: Required General

Prerequisite: Global I and II, US History

This course will emphasize the interaction between citizens and government at all levels – local, state and federal. It will encourage students to understand and participate in the Democratic process. The course is designed to meet the NY State standards for government.

Successful Completion=0.5 Credits

ECONOMICS

Course Type: Required General

Prerequisite: Global I and II, US History

This course will focus on basic economic concepts and understanding which all persons will need to function effectively and intelligently as citizens and participants in the economy of the United States and the world. The course will emphasize a rational decision making process that can be applied to various economic decisions. The course is designed to meet the NY State standards for economics.

Successful Completion=0.5 Credits

INTRODUCTION TO PSYCHOLOGY

Course Type: Social Studies Elective



Prerequisite: 11th and 12th graders ONLY; paired with Sociology in semesters

Psychology is the systematic study of individual human behavior and experience. The purpose of this course is to introduce the student to the content, terminology, methodology, and application of the discipline. This survey course contains an introduction followed by units based on the physiological, cognitive, behavioral, and affective domains of psychology.

Successful Completion=0.75 Credits

INTRODUCTION TO SOCIOLOGY



Course Type: Social Studies Elective

Prerequisite: 11th and 12th graders ONLY; paired with Psychology in semesters

Sociology examines how individuals, groups, and institutions interact to make up human societies. The purpose of this course is to learn about sociological perspectives, culture, social structures, and social inequality. Students will study people and the roles they play in society, both as individuals and groups.

Successful Completion=0.75 Credits

AP U.S. GOVERNMENT AND POLITICS

Course Type: Advanced Placement (Weighted 1.05)

Prerequisite: A final grade of 90% or better in U.S. History & Government or an 85% in AP U.S. History & Government and a 90% or better on the U.S. History & Government Regents Exam

This is a college level course in American Government & Politics designed to prepare students for the examination given for college credits as given by the College Board. The course will emphasize college-like lecture, note-taking, debates, and political discussions. Students will also be responsible for college level readings and college level papers and presentations. Successful completion of this course may release students from their Freshman year of college requirements in Government & Politics. *Students may take this course in place of senior year Economics & Government requirements as the class will also cover topics in Economics.*

Successful Completion=1.0 Credits

MATHEMATICS

ALGEBRA 1

Course Type: Regents

This course is aligned to the New York State Standards and is a requirement for the Regents Common Core Algebra 1 Exam. The course develops algebraic thinking skills and concepts connecting them to arithmetic skills to build on what the students already know.

Successful Completion=1.0 Credits

ALGEBRA 10

Course Type: Regents

This course is aligned to the New York State Standards and is a prerequisite for the Regents Common Core Algebra 1 Exam. The course is designed to build on what the students already know. It will also be strongly weighted to help students prepare for the Common Core Algebra 1 Exam.

Successful Completion=1.0 Credits

APPLIED GEOMETRY

Course Type: General

This course is aligned to the New York State Standards. This course introduces students to theorems and logical thinking. This course also enriches geometric concepts and measurement skills.

Successful Completion=1.0 Credits

GEOMETRY

Course Type: Regents

Prerequisite: Successful completion of Algebra 1

This course is aligned to the New York State Standards and is a prerequisite for the Regents Common Core Geometry exam. The course enriches geometric concepts and logical thinking. Measurement applications are integrated. With department recommendation labs may be required.

Successful Completion=1.0 Credits

ALGEBRA 2

Course Type: Regents

Prerequisite: Successful completion of Algebra 1 and Geometry

This course is aligned to the New York State Standards and is a prerequisite for the Common Core Algebra 2 Exam. This course enriches on algebra concepts with functional skills, and also gets students introduced to probability, statistics, and trigonometry.

Successful Completion=1.0 Credits

PRE-CALCULUS

Course Type: College-Credit, Honors (weighted 1.02)

Prerequisite: Successful completion of Algebra 2 OR Teacher Recommendation

This course is designed to bridge the gap between Algebra 2 and Calculus. Topics include integral functions and introduction to derivatives. It is the prerequisite to Calculus and is recommended for anyone planning on taking math in college.

NOTE: Students who complete Pre-Calculus higher are eligible to receive college credit through an articulation agreement with Erie Community College. A \$352 transcript fee is required that must be paid at the beginning of the school year.

Successful Completion=1.0 Credits

INTRODUCTION TO STATISTICS*

Course Type: General

Prerequisite: Successful completion of Algebra 2

Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will frequently work on projects involving the hands-on gathering and analysis of real world data. Ideas and computations presented in this course have immediate links and connections with actual events. Calculators will allow students to focus deeply on the concepts involved in statistics. This introduction to statistics course will include the following topics: descriptive statistics, probability, hypothesis testing for one and two samples, correlation and regression, and an introduction to analysis of variance.

Successful Completion=1.0 Credits

CONSUMER MATH

Course Type: General

Prerequisite: Completion of Algebra I Regents Exam, Algebra 10 & Applied Geometry

This project based course is designed to teach personal and professional financial responsibility through the study of banking, investment, credit, insurance, home and auto ownership, and other real-world applications of everyday math skills. ***As a requirement of this class you will need to work in our School Store.*** Shifts will be scheduled, and you will be responsible for pricing, inventory, operating a cash register, and gaining a better understanding of day-to-day business operations. This is a great way to obtain some real life work experience and put into action what you are learning within the classroom.

Successful Completion=1.0 Credits

COLLEGE MATHEMATICS*

Course Type: General, College Preparatory

Prerequisite: Successful completion of at least 2 math courses

This course is a developmental course designed to refresh arithmetic skills while developing basic and algebraic skills in preparing for the required mathematics courses in college. Arithmetic and elementary equations will be continuously reviewed with the following algebraic topics: operations with real numbers, operations with algebraic expressions, linear equations and inequalities, simple word problems, graphic, systems of equations, quadratic equations, operations with radical and basic skills. This course will help students succeed on college placement/entrance exams.

Successful Completion=1.0 Credits

CALCULUS*

Course Type: College-Credit, Advanced (weighted 1.05)

Prerequisite: Successful completion of Pre-Calculus

Calculus is a course for students of exceptional ability in mathematics who have successfully completed Pre-Calculus with at least an 80% average. Integral and differential calculus are taught.

Successful Completion=1.0 Credits

***NOTE:** Students who complete Calculus are eligible to receive college credit through an articulation agreement with Erie Community College. A \$352 transcript fee is required that must be paid at the beginning of the school year.*

SCIENCE

LIVING ENVIRONMENT/ HONORS LIVING ENVIRONMENT



Course Type: Regents

Prerequisite for Honors Living Environment: Final grade of 90% or higher in 8th Grade Science and Teacher Recommendation

This course is designed to increase the students' understanding of the organically diverse world in which they live. Students will be able to explain and contrast important biological concepts such as the living cell, human physiology, reproduction, genetics, and ecology. Students will become adept at generating and running scientific experiments, and must have successfully completed 30 laboratory experiences (1200 minutes) with satisfactory reports on file to be eligible to take the Regents exam.

Successful Completion=1.0 Credits

EARTH SCIENCE



Course Type: Regents

Prerequisite: Successful completion of Living Environment

This course presents a modern view of Earth Science that includes the study of astronomy, meteorology, climatology, and geology. Major concepts studied include: the conservation of mass energy; the sun earth energy system; dynamic equilibrium; cyclic changes; the principle of uniformitarianism - the present is the key to the past and the future. Critical to understanding science concepts is the use of scientific inquiry to develop explanations of the natural phenomena. Students must have successfully completed 1200 minutes with satisfactory reports on file to be eligible to take the Regents exam.

Successful Completion=1.0 Credits

CHEMISTRY



Course Type: Regents

Prerequisite: Successful completion of Living Environment and Earth Science or Honors Living Environment and Teacher Recommendation

This course is designed for students who have demonstrated exceptional ability in previous science courses. In this course students investigate the fundamental concepts of chemistry in great depth. Students must have successfully completed 30 laboratory experiences (1200 minutes) with satisfactory reports on file to be eligible to take the Regents exam.

Successful Completion=1.0 Credits

PHYSICS



Course Type: Regents

Prerequisite: Successful completion of Living Environment and Earth Science or Honors Living Environment and Teacher Recommendation

This course presents concepts that studies the physical world, matter, energy, and their relationships. Major areas of study include: motion, electricity, optics, and modern physics. Students must have successfully completed 30 laboratory experiences (1200 minutes) with satisfactory reports on file to be eligible to take the Regents exam.

Successful Completion=1.0 Credits

ASTRONOMY AND OCEANOGRAPHY*

Course Type: General

Prerequisite: Successful completion of Living Environment and Earth Science

Astronomy - The first half of this course will present a broad overview of astronomy and cosmology, focusing on the following areas: Origins of Modern Astronomy and Celestial Motions, Formation and Structure of Stars, including our Sun, Origins of the Universe, Galaxies and Solar Systems, Planets, Meteoroids, Asteroids and Comets, Space Exploration, Space Technology and Extraterrestrial Life

Oceanography – The second half of this course will present a broad overview of oceanography, including the impacts of climate change and human impact, History of Oceanography and Ocean Exploration, Geography and Seafloor Topography, Properties of Seawater (salinity, temperature, density), Ocean Currents and Global Circulation, Waves and Wave Dynamics, Marine Biology, Effects of Climate Change and Human Activity.

Successful Completion=1.0 Credits

FORENSICS*

Course Type: General

Prerequisite: Successful Completion of Living Environment and Earth Science

Forensics is a laboratory-based introduction to the analysis of crime sciences by collecting and analyzing physical evidence. The course is designed to integrate the core scientific disciplines, while giving students both theory and hands on experience with the skills and knowledge required of a forensic crime science investigator. Sample evidence will include: Fingerprinting, DNA, bones, glass, hair & fibers, toxicology, blood spatter patterns, ballistics, chromatography, entomology, soil and sand samples.

Successful Completion=1.0 Credits

ANATOMY AND PHYSIOLOGY*



Course Type: General

Prerequisite: Successful Completion of Living Environment and Chemistry or Teacher Recommendation

Anatomy and Physiology is a course that provides students an opportunity to explore the intricate and sophisticated relationship between structure and function in the human body. The course offers students an environment in which they may probe topics such as homeostasis, anatomical and physiological disorders, medical diagnosis and treatment, and survey of the remarkable array of body systems that comprise the human body. Laboratory activities reinforce concepts and principles presented in the course.

APPLIED SCIENCE

Course Type: General

Prerequisite: Teacher Recommendation

Applied Sciences covers all applied science specialties—including acoustics, aeronautics, neural networks, engineering, physics, space science and much more—to provide access on all of the topics of scientific interest from today's top headlines.

Successful Completion=1.0 Credits

SPANISH

SPANISH I

Course Type: General Required

Spanish I balances grammar and communication in Spanish. Relevant themes such as friends, family, school, and leisure activities, are designed around the students and the world around them to facilitate language learning. Students also study cultural aspects of various Spanish speaking countries and regions.

Successful Completion=1.0 Credits

SPANISH II

Course Type: General

Prerequisite: Spanish 1 or successful completion of Spanish proficiency exam

Spanish II revisits the themes of students and the world around them while balancing grammar and communication in Spanish. The students expand their vocabulary, grammar, and cultural understanding as they revisit each theme in greater depth.

Successful Completion=1.0 Credits

SPANISH III

Course Type: General, Regional Exam

Prerequisite: Successful completion of Spanish II

Spanish III is comprised of more abstract and thought provoking themes such as caring for the environment, the role of government, and describing art and culture. Activities combine communication, grammar study, and cross-curricular content with authentic literature and poetry.

Successful Completion=1.0 Credits

ADVANCED SPANISH*

Course Type: College Credit, Advanced (weighted 1.05)

Prerequisite: Spanish III and Teacher Recommendation

This college level course is a review of grammar and an evaluation in the reading of easy Spanish texts. Students will prepare written and oral reports. The aim of the course is to expand the vocabulary and improve oral comprehension upon successful completion.

NOTE: Students who complete Advanced Spanish with a passing grade are eligible to receive college credit through an articulation agreement with Erie Community College. A \$308 tuition fee is required that must be paid in the spring.

Successful Completion=1.0 Credits

PHYSICAL EDUCATION

PHYSICAL EDUCATION 9-12

Course Type: General Required

The Physical Education curriculum at the high school level is designed to offer all students a fitness-based curriculum and a chance to experience a wide range of physical activities with the use of heart rate monitors. These heart rate monitors are used to track the student's progress during their workout. At the end of each class, an email is sent out by our heart rate monitor system to the student and parent for instant feedback of the accomplishments of each class. Another highlight of the PE program is students are separated by the activity of their choice. They can choose from traditional sports in the main gym or participate in movement-based Xbox games or use any of the cardio equipment in our fitness rooms. All activities and lessons are designed to stress the overall fitness of the student and follow the three New York State Learning Standards for Physical Education.

Successful Completion=0.75 Credits

HEALTH EDUCATION+

Course Type: General Required

This course focuses on at risk behaviors and emphasizes how students can develop prevention skills that ensure health and wellness. With the unhealthy state of our nation, Health gives students strategies to not only improve teen health but to become health literate for a productive, healthy future. This course develops attitudes, skills and behaviors that enhance the quality of life through all aspects of social, mental and physical health. Students will become more knowledgeable regarding decision-making, mental health issues, nutrition, physical fitness, stress management, human sexuality and disease prevention. The effects of all drugs on the human body and on society as a whole are also investigated.

Successful Completion=0.75 Credits

+Students will enroll in Health at the same time as Physical Education in 10th grade and will receive credit for BOTH courses. Note: Health is a New York State requirement for graduation, not an elective.

BUSINESS AND INFORMATION TECHNOLOGY

FRESHMAN SEMINAR/CAREERS AND FINANCIAL MANAGEMENT

Course Type: Required General, 9th graders ONLY



This course is designed to ease the transition of students into high school and enable them to grow into more well-rounded young adults. Freshman will have the opportunity to learn the essential skills for academic success, create a support system for themselves, and hone in on the interpersonal skills necessary to best handle the social and emotional stresses of high school. Students will also explore career options and learn practical financial skills including making money work for them and how to take control of their financial lives. We are also excited to work with your children as they gain a better understanding of SAY YES and how it will affect their educational careers.

Successful Completion = 0.75 Credits

BUSINESS ANALYSIS/BUSINESS COMPUTER APPLICATIONS (BABCA)

Course Type: General Elective



Thinking about owning your own business? Want to learn what makes a business successful? Can you type with both hands and without looking at the keyboard? Are you able to use the Microsoft Suite: Word, Excel, PowerPoint, Access, and Publisher? In this class students will learn how businesses are organized to provide a product, service, or an idea and gain a better understanding of how to meet customers' needs and demands. Students will also develop their technological skills through Keyboarding and Microsoft software. This class is project based.

Successful Completion=0.75 Credits

LEADERS IN TRAINING*

Course Type: General Elective, maximum of 50 students enrolled



Prerequisite: Grades 10 and 11 only

Do you have leadership potential? Would you like to be seen as a leader? In this course you will build a foundation of leadership skills and gain a better appreciation for diversity and a commitment to both school and community service and enhance those skills necessary to become an active and productive citizen. In this class students will learn through doing and completing projects. As a member of this class you will also have the opportunity to apply for the Leadership Buffalo Youth Leadership program.

Successful Completion: 0.75 Credits

!!NEW COURSE!! DISCOVERING THE DIGITAL WORLD: COMPUTER PRINCIPLES AND PROGRAMMING*

Course Type: General Elective, offered alternating years



Prerequisite: Grades 10, 11, or 12 only and BABCA

Students will better understand the digital world around them. This course will prepare students to be active and informed contributors to an increasingly technological society. Topics covered will include - programming, computing, HTML and will inspire students to build web sites, apps, games, and program computing devices. This is a hands on, creative, project based course.

Successful Completion=0.75 Credits

PRINCIPLES OF MARKETING*

Course Type: General Elective



Prerequisite: Grades 10, 11, or 12 only, Introduction to Business

Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology in the marketplace. The class will focus on many areas of marketing including Sports, Fashion, and Hospitality. Students may have a unique opportunity to participate in the Young Entrepreneurs academy as part of this course. This class is project based.

Successful Completion = 0.75 Credits

INTRODUCTION TO BUSINESS*



Students will be introduced to forms of business ownership, managing people in organizations, entrepreneurship, pricing, human resources, and operations. This course is great if you think you might like to own your own business in the future or go into management.

Successful Completion: 0.75 Credits

FOUNDATIONS OF ACCOUNTING*

Course Type: General Elective



Prerequisite: Grades 10, 11, or 12 only, Introduction to Business

This course introduces basic accounting principles for a business. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization. This class is project based.

Successful Completion = 0.75 Credits (can be used as Business or Math Credit)

ADVANCED COMPUTER APPLICATIONS*

Course Type: General Elective, offered alternating years



Prerequisite: BABCA or Permission from Instructor; Grades 10-12 ONLY

This course will explore advanced functionality within the Microsoft Office Suite. Students will receive an in-depth working knowledge of Word, Excel, Access, Power Point, and Publisher. In addition, an introduction will be made to basic coding and One Note. In this course students will also prepare to take the Microsoft Office Specialist Certification exam, an industry recognized technology certification. This 100% project based class will allow students to view data and information in completely different ways and broaden their view of what is possible on a computer.

Successful Completion = 0.75 Credits

!!NEW COURSE!! INTRODUCTION TO LOGISTICS*

Course Type: General Elective



Grades 10, 11, and 12 only—juniors and seniors preferred

Students will learn about careers and businesses involved in the planning, management and movement of people, materials and products by road, air, rail and water. It also includes related professional and technical services such as infrastructure planning and management, logistics, and maintenance of equipment and facilities.

Successful Completion = 1.0 Credits

COLLEGE AND CAREER SUCCESS SKILLS

Course Type: General Elective

Prerequisite: Grades 10 and 11 only (11th grade preferred)

This course will provide a “real-world” hands-on approach to gaining a better understanding of ALL career options after high school. Students will conduct career research, take interest inventories, go through the job application process, and create their professional documents. During the second half of this course students will have the opportunity to conduct college major and school research, be guided through the college application process, learn about financial aid, and hear from college admissions representatives)

Successful Completion: 1.0 Credits



CAREER EXPLORATION INTERNSHIP PROGRAM (CEIP)

Prerequisite: Students need to have working papers in order to participate.



The Career Exploration Internship Program assists students with understanding the linkages between school and work. Through CEIP, students explore and learn about a variety of career options by completing a non-paid worksite experience. Students select the career clusters that are explored.

The CEIP is offered to Seniors, as a follow up to underclassmen Job Shadows and Tours, and prior participation in the other Career Exploration opportunities offered. The CEIP reinforces an individual's opportunity to learn, firsthand, about the skill and educational requirements necessary for career areas in which the students believe they are interested in pursuing. The partnership between education and business is an essential one that will allow the students to future network and develop themselves.

Successful Completion of the Course:

- 1/2 credit – 54 hours (work site) of non-paid internship and 27 hours of in school supporting instruction
- 1 full credit – 108 hours (work site) of non-paid internship and 54 hours of in school supporting instruction

PROJECT LEAD THE WAY (PLTW) AND ADVANCED MANUFACTURING

INTRODUCTION TO ENGINEERING DESIGN (IED)



Course Type: General, Project Lead the Way (PLTW)

Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software, and use an engineering notebook to document their work.

Successful Completion: 1.0 Credits

PRINCIPLES OF ENGINEERING (POE)



Course Type: General, Project Lead the Way (PLTW)

Prerequisite: IED or Teacher Recommendation

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and robotics and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

Successful Completion: 1.0 Credits

PRINCIPLES OF ENGINEERING (POE)-HONORS



Course Type: General, Project Lead the Way (PLTW)

Prerequisite: IED w/90.0 Course Grade, Algebra 1 complete with passing score on Regents or CC Exam, Geometry Enrollment, and Teacher Recommendation

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and robotics and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. The honors level is faster paced and covers more topics and projects than standard POE.

Successful Completion=1.0 Credits

AEROSPACE ENGINEERING (AE)



Course Type: General, Project Lead the Way (PLTW)

Prerequisites: IED and POE

This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing airfoils, gliders, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robotics systems through projects such as remotely operated vehicles and autonomous rovers.

Successful Completion: 1.0 Credits

CIVIL ENGINEERING AND ARCHITETURE (CEA)



Course Type: General, Project Lead the Way (PLTW)

Prerequisites: IED, POE, Geometry enrollment and/or completion. Algebra II enrollment recommended.

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software.

Successful Completion: 1.0 Credits

COMPUTER INTEGRATED MANUFACTURING



Course Type: General, Project Lead the Way (PLTW)

Prerequisites: IED and POE

Manufactured items are part of everyday life, yet most students have not been introduced to the high-tech, innovative nature of modern manufacturing. This course illuminates the opportunities related to understanding manufacturing. At the same time, it teaches students about manufacturing processes, product design, robotics, and automation.

Successful Completion: 1.0 Credits

DIGITAL ELECTRONICS (DE)



Course Type: General, Project Lead the Way (PLTW)

Prerequisite: IED and POE

From smart phones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

Successful Completion: 1.0 Credits

ENGINEERING DESIGN AND DEVELOPMENT (EDD)



Course Type: General, Project Lead the Way (PLTW)

Prerequisite: IED, POE, one other PLTW course, or teacher recommendation

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

Successful Completion: 1.0 Credits



ADDITIVE MANUFACTURING

Prerequisite: 12th Grade ONLY, IED OR Graphic Design I, Geometry complete with passing score on Regents/CC Exam, Student must have teacher recommendation from either the PLTW or the Art Department (See Mr. Morris or Ms. Mora).

Students will use modern technology and equipment to create three-dimensional products using techniques where material is formed or added to the objects in sequential layers. Course includes the history, development, and types of additive manufacturing. Coursework includes the use of computer aided design systems, 3D Printing machines, work-based learning, and job shadowing. Students will develop skills to use computer systems to design and model 3-dimensional solutions to problems then produce their designs using 3-D printers.

Successful Completion: 1.0 Credits

MUSIC

TREBLE/LESSONS

Course Type: General Elective



Level: Beginner/Intermediate

Treble Choir is a vocal ensemble open to students in grades 9-12. Here, they will be introduced to healthy vocal technique and musical skills to help them become more independent and literate musicians in the future. This ensemble participates in 3 MANDATORY concerts throughout the year, and performs repertoire spanning from Pop to Classical. Students are required to attend a weekly lesson along with our regular rehearsal schedule to build their individual vocal technique and musicianship.

**This course is a pre-requisite for auditioning for Mixed Choir.*

Successful Completion = 1.0 Credits

MIXED CHOIR/LESSONS*

Course Type: General Elective



Level: Advanced

Pre-Requisite: Treble Choir and Audition and/or Director's Discretion

Select Choir is a vocal performance ensemble that demands a high level of musicianship, focus, and effort. Repertoire is varied, but typically all a cappella and high level. This ensemble represents the school at multiple community and school events and requires professionalism and responsibility from each of its members. This is also a competitive group that represents the school at a Music in the Parks competition each June at Darien Lake. Students are required to attend a weekly lesson along with our regular rehearsal schedule to build their individual vocal technique and musicianship.

Attendance at ALL performances is MANDATORY.

Successful Completion = 1.0 Credits

FOUNDATIONS OF MUSIC: PIANO

Course Type: General Elective



Level: All levels

In Piano class students will learn/improve proper piano technique and musicianship while learning to read Western notation and understand basic music theory. All materials are provided for the students and will be assigned based on the student's individual skill level. The abilities to work independently and to remain focused on improvement will be necessary to succeed in piano class.

Successful Completion = 0.75 Credits

SYMPHONIC BAND/ LESSONS

Course Type: General Elective



Prerequisite: Currently a member of band or by teacher recommendation.

Symphonic band is open to students in grades 9-12 who currently play a band instrument. Students will develop the technical and auditory skills necessary to play their instrument at a higher level. This development will be achieved through the practice and performance of a variety of band literature in rehearsals and weekly small-group, private lessons. Concert and competition attendance is mandatory.

New Students: It takes time to pick the appropriate instrument and to develop your skills to a level appropriate for joining band rehearsals. For this reason new students may not sign up for band unless they have spoken with Mr. Ornowski first. Together we will pick the best instrument for you and develop a plan to get you playing at a level appropriate to join the band in rehearsals.

Successful Completion = 1.0 credit

JAZZ ENSEMBLE/LESSONS

Course Type: General Elective



Prerequisite: Audition/ Teacher Recommendation

Selected into this group is determined by the band director through an audition process. Students who are in jazz ensemble band **MUST** also be in symphonic band (with limited exceptions). Concert and competition attendance is mandatory.

Successful Completion = 0.75 Credits

COLLEGE LEVEL MUSIC THEORY*

Course Type: General Elective



Prerequisite: Students must be signed up in band or chorus OR have a teacher recommendation.

Music Theory is the study of why music sounds the way it does and the basics of western classical music. This is an advanced course in the fundamentals of music, such as reading notation, transposition, meters, scales, modes, chords, harmony, arranging, 4-part writing, basic conducting, and singing. Students will develop music theory skills through exercises, classwork, singing, and ear training. Music theory is geared toward students who are already involved in chorus or band and have thoughts of going on for music after high school, or anyone who wishes to truly learn about the details of music. Grading is based on class work and projects.

Successful Completion = 0.75 Credits

MUSIC IMPROVISATION*

Course Type: General Elective



Prerequisite: Currently a member of band or chorus OR teacher recommendation.

Music improv is the creative activity of composing music, in the moment. In a traditional music ensemble, musicians are asked to accurately perform music that has been strictly notated for them. This class gives the power of composition back to you, the musician, through developing the techniques necessary for mastering the art of improv. These techniques require us to further develop, music theory, ear training and communication skills. Building these skills and techniques will help students become more comfortable in our guided, creative process, of improvising. Music Improvisation has become synonymous with jazz / blues however even the most advanced classical artist (such as YoYo Ma) have admitted to benefiting greatly from the techniques of improv. This is a performance based class so enrolment will be limited to students who have prior experience playing an instrument or singing in an ensemble.

Successful Completion = 0.75 Credits

DIGITAL MUSIC: INTRODUCTION TO GARAGE BAND *

Course Type: General Elective



Music Technology combines music theory instruction and creativity with high-end technology and software. Students will learn to use various state-of-the-art composition programs to create creative

and original pieces in varying styles. Students must have the ability to work independently in this project-based class. Grades are based on project rubrics and checklists. Prior music experience, technology experience, basic piano skills and music theory knowledge are HIGHLY RECOMMENDED to succeed in Music Technology.

Successful Completion=0.75 Credits

VISUAL ART

STUDIO IN ART

Course Type: General Elective



This is a foundation course with a thematic approach that introduces the elements of art through history, aesthetics, criticism and the production of art. A sampling of 2-dimensional is offered. Students not only create works but also have the opportunity to reflect orally and in writing about the nature and content of their art. A trip to the Albright-Knox Art Gallery exposes the students to famous art work in a museum setting.

Successful Completion=1.0 Credits

STUDIO IN CRAFT ART

Course Type: General Elective



This is a rigorous workshop class where you will explore making 3D and cultural art in a “studio” environment. Studio in Craft Art combines a variety of materials and skills to create art while learning the strategies of an artist; planning, working, critiquing and presenting work. You will explore printmaking, clay, mosaics, fabric manipulation and much more! Because of the intricacy of craft art, this course will require time spent outside of class to plan, work on, and complete assignments.

Successful Completion=1.0 Credits

DIGITAL ARTS 1 (Formally Studio in Photography and Graphic Design 1)

Course Type: General Elective



Prerequisite: Studio in Art or Craft & Teacher Recommendation

Digital Arts 1 is a course that focuses on building a solid foundation of the basic elements of visual art; line, shape, form, color, value, space, and texture. This course focuses on teaching core skills of using the iMac computers, Canon Rebel t6 Cameras, Adobe Photoshop, and Adobe Illustrator to create vector and raster based artwork in a Fine Art context. Topics include learning the artistic processes of planning, creating, presenting, and critiquing original digital projects. Projects include posters, photography series, stop-motion videos, book binding, and so much more! (This course includes a mandatory \$10 lab fee.)

Successful Completion=1.0 Credits

DIGITAL ARTS 2 (Formally Studio in Photography 2 and Graphic Design 2)

Course Type: General Elective



Prerequisite: Digital Arts 1 & Teacher Recommendation

Digital Arts 2 allows students to build on the skills and concepts that they began in Digital Arts 1 as they develop their vocabulary of digital design. Students will advance their skills on the iMac computers, Canon Rebel t6 Cameras, Adobe Photoshop, and Adobe Illustrator. Students will also be introduced to Adobe Photoshop Camera Raw and Digital Arts Careers. Not all work will be completed on the CHSAT campus; students are required to attend workshops, fieldtrips, and to complete

assignments at home! Projects include screen printing, paper marbling, book binding, gifs, photography series, contests, and so much more! (This course includes a mandatory \$10 lab fee.)

Successful Completion=1.0 Credits

DRAWING, PAINTING & DESIGN (Formally Drawing & Painting/Advanced Drawing and Painting)

Course Type: General Elective



Prerequisite: Studio in Art or Craft

This course will build on understanding of the Elements and Principles of Art through investigation of two-dimensional media and creative visual problem solving. Students will be introduced to the concepts of one, two, and three- point visual perspective, figure drawing, still life, collage, acrylic, oil and watercolor media. Emphasis on compositional balance problem solving and realistic drawing techniques using pen and ink, prismacolor pencils, and watercolor will allow students to elaborate on basic skills and move into conceptual and thematic two-dimensional work. Students will keep a daily sketchbook/visual journal, research the life and work of famous artists, and develop their own expertise in one chosen media. *Formally Studio in Drawing and Painting/Advanced Drawing and Painting*

Successful Completion=1.0 Credits

!!NEW COURSE!! THREE DIMENSIONAL DESIGN

Course Type: General Elective



Prerequisite: Studio in Art or Craft

This course will introduce basic three-dimensional processes and materials as well as develop the ability to analyze form and space relationships. This course will explore a variety of mediums including plaster, clay, and other mixed media. Emphasis will be on basic design elements, function, aesthetics, creativity and craftsmanship using essential vocabulary and exploring art from prior knowledge.

Successful Completion=1.0 Credits

!!NEW COURSE!! DIGITAL ARTS 3

Course Type: General Elective



Prerequisite: Digital Arts 2 & Teacher Recommendation

Digital Arts 3 is an independent-project based class where students can focus on an area of Digital Art they are interested in and develop their skills further. Students will choose their area of interest and begin to independently create a collection of digital art projects for their digital design portfolio. Areas of interest may include Photography, Graphic Design, or Videography. By the end of the course students will have a strong Digital Arts portfolio to submit to colleges! This course is for incredibly motivated and skilled Digital Arts students.

Successful Completion = 1.0 credits

PRE-AP ART

Course Type: General Elective



Prerequisite: Studio in Art/Craft, Level 2 Art Class, Instructor Permission

Pre-AP Studio in Art is a third level for the student who has already taken Drawing, Painting and Design and is planning to submit an AP Studio Art portfolio the following year. This course will be dedicated to completing the Breadth section of the AP Studio Art portfolio. The Breadth section consists of 12, two-dimensional masterworks that focus on the elements and principles of art (line, shape, color, form, value, texture, space, balance, pattern, contrast, movement, emphasis, rhythm and

unity). Students will specialize their investigations with media of their choice and decide what type of two-dimensional portfolio they plan to submit the following year (Drawing or 2D).

AP Studio in Art- to be offered in 2020-21 school year

Successful Completion=1.0 Credits

STUDIO IN YEARBOOK DESIGN

Course Type: General Elective



Prerequisite: Digital Arts 1

This advanced elective is an advanced course that will create the 2019-2020 yearbook and meets 2 days per cycle for the entire school year. Students will further their development of photography and graphic design skills. Students will be required to take photos outside of class time and will have special passes to school events! Class time will be used to create, promote, and sell the yearbook.

Successful Completion = 0.75 Credits

ADDITIONAL PROGRAMS

INTRODUCTION TO CULINARY ARTS*

Course Type: General Elective

**** Intro to Culinary Arts is a NON-Credit Bearing course****

Culinary Arts is a 2-year program which will focus on the various aspects of food service and hospitality. Topics include proper food handling, food safety and cross-contamination, proper dress requirements, portion control, using recipes, basic knife skills and knife safety, and food presentation. This program provides students with an experience that is similar to being in a restaurant because they will be preparing meals for the student body.

JROTC @ MARITIME CHARTER SCHOOL (Naval Science)

Course Type: General Elective

****Credit is earned at Maritime Charter School and added to your CSAT transcript****

Prerequisite: Grades 10, 11, and 12 only, must have permission of Counselor AND Parent/Guardian
CSAT has a partnership with WNY Maritime Charter School. Students who apply and are accepted will travel to Maritime Charter School each day to participate in Naval Science coursework.

Attendance each day is mandatory and students are expected to represent CSAT in a positive way while at Maritime. Students must be in good academic standing and be recommended by their counselor to participate. This program is especially beneficial for students that are interested in joining the armed services.

See Mrs. Piazza for an application for JROTC by April 1st!