



**DUANESBURG
JR. / SR.
HIGH SCHOOL
PROGRAM OF
STUDIES
2021-2022**



Duanesburg Junior/Senior High School

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The Duanesburg Central School District does not discriminate in education or employment on the basis of sex, race, color, age, religion, national origin, or handicap. This policy is consistent with relevant governmental statutes and regulations. Inquiries may be referred to the district's Affirmative Action Officer, Mr. Niedermeier.

Student Records

All student records, by law, are confidential. Only certified school personnel may have access to them. Parents may review their child's records with the counselors by setting up an appointment.

Table Of Contents

General Academic Information	5-10
Credit Information	5
New York State Graduation Requirements	12-14
Accelerated Graduation/Non-Traditional	6
Grading	6-7
Grade Point Average	6-7
Weighting	7-8
Distance Learning	8
Course Registration	9
Add/Drop Procedure	9
Special Education	9-10
NCAA	11-12
JR High	
JR High Requirements	16
Art	19
English	25
Family & Consumer Science	28
Health	29
Math	31
Music	33
Physical Education	30
Science	35
Social Studies	37-38
Technology	41-42
World Language	45
SR High	
Art	19-22
Business Education	23-24
English	25-27
Family & Consumer Science	28-29
Health	29-30
Math	31-33
Music	33-34
Physical Education	30-31
Science	35-37
Social Studies	38-41
Technology/Engineering	42-44
World Language	45-46
GradPoint	16
AP/UHS Course Requirements	17
DCS + 1 Program	17
College & Career Readiness	17-18

***DISCLAIMER: Courses listed will be available according to budget considerations and student requests.**

Dear Parents and Students:

Welcome to the Duquesburg JR/SR High School Program of Studies Guide. The 2021-2022 guide is an updated, contemporary edition that provides information about JR/SR High School requirements as well as course offerings and descriptions that will be available to students in grades 7-12.

The information in the Program of Studies Guide is organized into two sections. Our program section provides details about graduation requirements, course credit; grading and honor roll/principal's list information, information about the AP and University in the High School (UHS) opportunities as well as descriptions of our Distance Learning (DL) and video conferencing (VAP) offerings. The academic section, organized by department, provides specific information about the courses offered for students in grades 7-12.

Our intent in providing this updated guide is to support student and parent decision making regarding their child's schedule to maximize their educational program. It is essential to plan and make thoughtful decisions about course selections. Therefore, take the time to select an alternative course option which can be substituted for a course that is not offered.

Duquesburg JR/SR High School offers a supportive learning environment. Our students are dignified, driven, and disciplined. Our goal is to assure our learners are enrolled in rigorous courses, supporting their development of college and career readiness, while building critical thinking, problem solving, collaboration, and communication skills. Communication is essential if our students are to be successful. Please do not hesitate to contact our counselors, Mrs. Goebel or Ms. Houghtaling, our teaching staff or myself should you have any questions about your child's educational program.

Sincerely,

Jodi Marvin
Principal

Schedule

Fall Semester/Spring Semester (20-weeks each)

- Two 10-week periods in each
- Four-day cycle (days 1 through 4)
- Core classes run everyday
- Electives can run everyday or every other day

Credit

A credit is an indicator of the value the school gives to a course. The credit is based on the time and work involved in a course. Example: English 9 is a full year course, so it earns 1.0 credit. Food & Nutrition meets every day for one semester and earns 0.50 credits. Courses that meet every other day (odd or even) for the entire year would also carry 0.50 credits. You must earn a certain number of credits from certain subject areas and pass the required courses for 9th, 10th, 11th and 12th grade, which are listed under graduation requirements.

Minimum Credit/Course Load

Students in grades 9-11 must take a minimum of 6.5 credits including Physical Education. Seniors need to complete necessary credits to graduate and/or be scheduled for a minimum of 6 credits their senior year. Students should carry a course load that they are able to manage while still being challenged academically.

Grade Placement/Promotion

Promotion to the next grade level is determined during the summer (prior to the start of school) and will not be adjusted during the school year upon completion of credit-bearing semester-long courses or blending (repeated) courses. Grade level is determined by the number of credits a student has earned. The year that a student enters 9th grade does not determine grade level or graduation year (but rather determines graduation requirements).

- Grade 7-completion of 6th grade
- Grade 8-completion of 7th grade
- Grade 9-completion of 8th grade
- Grade 10-must have earned a minimum of 5.5 credits
- Grade 11-must have earned a minimum of 11 credits
- Grade 12-must have earned a minimum of 16.5 credits

Prerequisites

A Prerequisite is a requirement that students must meet before a certain course can be taken. Example: To take 2-D Art, a student must complete Studio Art prior. AP and UHS courses have other prerequisites.

Electives

An Elective is a course students choose to take in order to round out their education and earn a sufficient credit for graduation. Elective courses are chosen after all required courses have been scheduled. Once required courses have been scheduled, electives can be chosen based on the student's interest, and course availability. In order to take electives, students must meet all prerequisites. Some prerequisites may include a completion of a previous course, completion of or a minimum grade on a regents exam, or a minimum previous course average.

See next page for Credit Requirements

Accelerated Graduation/Non-Traditional Study

Students who wish to complete their graduation requirements in less than four years must plan their program accordingly. ***Requests must be approved by the school counselor, high school principal and superintendent, prior to beginning.*** A contract must be issued by the school counseling office clearly defining requirements and bearing the signatures of the student, parent/guardian(s) of the student, the school counselor, and the high school principal and superintendent.

Progress Reports

Published at the 5th week of each 10-week marking period. Progress Reports are posted to the parent portal for review. Contact the Counseling Office to request a copy.

Report Cards

Published approximately one week after the close of a 10-week marking period. Report cards are posted to the parent portal for review. Students are expected to pay for lost and damaged items before the final report card will be released to the portal. Contact the Counseling Office to request a hard copy.

Grade Point Average (GPA) Reported on Transcripts vs. Report Cards

A student's grade point average reported on his/her transcript is compiled of all the courses he/she has taken that are scored numerically. Grade Point Average (GPA) Reported on Transcripts vs. Report Cards and divided by the number of credits the courses are worth.

The **transcript** is the student's legal record and is what is sent to colleges, the military, and employers when requested. The transcript is an overall picture of academics for grades 9 through 12. A **report card** is a snapshot taken each quarter/ten weeks indicating how a student is currently doing.

A student's grade point average reported on his/her report card is compiled of the courses he/she is currently taking and are scored numerically and divided by the number of courses.

The **report card GPA** is used to determine Principal's List/Honor Roll, awards, and National Honor Society (NHS) nomination. The report card GPA looks at an individual quarter, semester or year in one snapshot that divides by the number of courses, not the number of credits.

Weighted Grades

Weighting means that certain higher level courses will be multiplied by either 1.025 or 1.05 depending on the course. For example, a grade of 80% in AP English would be multiplied by 1.05 and would calculate as a grade of 84%. This weighted grade would be used toward the student's weighted GPA and class rank. The weighted average would also be used for honor roll and honor society eligibility. The courses with a 1.025 multiplier are Honors and University in the High School courses. All AP (Advanced Placement) courses will receive the 1.05 multiplier.

Weighted GPA Calculation

In order to determine a student's grade point average (GPA), the course accrued will have a weighted grade status at the high school level. Weighting means that certain higher level courses will be multiplied by either 1.05 (for AP courses), 1.025 (for UHS courses), or 1.0 for Regents level courses.

Course Name	Grade	Credits	Weighted?	Possible Points	Total
AP English 11	85	1.0	Y (1.05)	$85 \times 1.05 = 89.25$	
UHS American History	80	1.0	Y (1.025)	$80 \times 1.025 = 82.00$	
Algebra II	79	1.0	N (1.00)	$79 \times 1.00 = 79$	
Regents Chemistry	81	1.0	N (1.00)	$81 \times 1.00 = 81$	
HS PE	95	0.5	N (1.00)	$95 \times .05 = 47.50$	
HS Health	93	0.5	N (1.00)	$93 \times .05 = 46.50$	
UHS Principles of Business	89	1.0	Y (1.025)	$89 \times 1.025 = 91.23$	
Spanish II	80	1.0	N (1.00)	$80 \times 1.00 = 80.00$	

Forensics	89	1.0	N (1.00)	89x 1.00 = 89
Total		8.0		685.48 points
Weighted GPA = 685.48/8.0 = 85.69				

High School Credit Earned in Junior High

DCS may grant credit to Junior High students who take high school courses in Junior High. These courses must have the same expectations, curriculum and final exams as the equivalent courses taught in high school. The following DCS courses have been identified for high school credit:

- Algebra I
- Regents Earth Science
- Spanish 1A & 1B (equivalent to Spanish Culture in the HS)

Grading

The final grade in a course is determined by the teacher of record.

Distance Learning

DL courses are another opportunity available at Duanesburg for students in grades 9-12. DL courses allow DCS to expand the course selection available for students. All teachers and students participating can see and hear each other via television screens and microphones. There are limited seats available in each DL course. All students participating must take the courses seriously and be on their best behavior. DL course availability and schedule is not completed until the end of the school year. Consequently, students will need to choose and sign up for alternatives for chosen DL courses in the end that courses are not offered or available where the students have room in their schedule. Students will be removed permanently from DL courses for poor behavior. Removal is at the discretion of the DL *host* teacher.

Course Registration and Scheduling

Registration procedures are as follows:

- The **Program of Studies Guide** is made available and online. Hard copies are available from the school counseling office.
- Teachers make recommendations for students to advance to the next grade or level and for acceleration.

- Students meet with school counselors, and a sequence of courses best suited to their interests, goals, and strengths are chosen. Parents may call counselors to discuss their students' schedule before, during or after this step.
- Administration and the school counseling department design a master schedule
- Once courses are chosen and schedules are built, ONLY NECESSARY CHANGES are permitted.
- Students and their parents/guardians are advised to contact their counselor over the summer if schedule adjustments must be made. Summer appointments may be at a limited availability

Add/Drop Procedure

A course must be added or dropped within the first ten days of a semester. After 10 days a course cannot be dropped without counselor, principal and parent approval. Course add/drop forms are available in the school counseling office. Students who drop a course after 10 days will receive a W on their transcript.

Course Failure

If a student fails one or more subjects, he/she places future learning in jeopardy. Students must have a minimum grade of 55 to attend summer school. If a student cannot attend summer school, he/she will be required to repeat the failed course during the following school year. Failure of any major subject reduces the number of elective options and may result in the student not receiving the necessary credits towards graduation.

Special Education

Duanesburg School offers a continuum of Special Education services to all eligible students with specific disabilities. To register for a Special Education program or to access its services, a student must have an Individual Education Plan (IEP). The courses students with an IEP can take will be determined by the Pupil Service Team. For more information, students and parents/guardians may contact their school counselor.

504

The "504" in "504 plan" refers to Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, which specifies that no one with a disability can be excluded from participating in federally funded programs, or activities, including elementary, secondary or postsecondary schooling. "Disability" in this context refers to a "physical or mental impairment which substantially limits one or more major life activities." This can include physical impairments; illnesses or injuries; communicable diseases; chronic conditions like asthma, allergies and diabetes; and learning problems. A 504 plan spells out the modifications and accommodations that will be needed for these students to have an opportunity to perform at the same level as their peers, and might include such things as wheelchair ramps, blood sugar monitoring, an extra set of textbooks, a peanut-free lunch environment, home instruction, a tape recorder or keyboard for taking notes.

Response to Intervention (RtI)

Response to Intervention (RtI) is a multi-tiered early prevention and intervention system designed to improve outcomes for all students. The District will provide multiple tiers of increasingly intensive levels of targeted intervention and instruction for those students who do not make satisfactory progress in their levels of performance and/or in their rate of learning to meet age or grade level standards. It is expected that the use of the Tier Level instruction will be specific to each student's needs and will be an ongoing process, with students entering and exiting tiers of intervention according to the analysis of student performance data and progress monitoring.

Lost and/or Damaged Items

Students are expected to pay for any lost or damaged items before their diploma will be released to them.

Credit Recovery/Course Retake

Students who do not make adequate progress towards course completion or fail a course with an average between 55-64 may be allowed to earn credit back through Grad Point, an online learning management system. Students must have regular contact, guidance and direction from a certified teacher in the course they are recovering credit. Students will need to discuss this with their Guidance Counselor and Administration.

Regents Examination Retakes

Students are expected to retake Regents examinations that they have not passed. It is suggested that students retake examinations as soon as possible after completing the corresponding course. For students who repeat an examination, the highest Regents exam score will be recorded on the student's transcript.

NCAA

Students entering any college or university on or after August 1, 2005 and wishing to play Division I or II sports must register with the NCAA prior to graduation. Students can register with the NCAA Initial-Eligibility Clearinghouse any time during and after their junior year. At the time of registration, a transcript and SAT or ACT scores should also be sent to the Clearinghouse.

NCAA For Division I:

Students entering college in 2008 or later and who want to participate in athletics or receive an athletic scholarship during the first years must complete the following:

Students must have a combined SAT or ACT sum score that matches the core-course grade point average (GPA) and test score sliding scale (available on the NCAA Clearinghouse website). For example, a 2.4 core-course GPA needs an 860 on the SAT.

Students must complete 16 core courses including the following:

- At least 4 years of English
- At least 3 years of Math (at the level of Algebra I or above)
- At least 2 years of natural or physical science (including 1 lab course)
- At least 1 year of additional courses in English, math or natural or physical science
- At least 2 years or social sciences, and
- 4 additional academic courses in any of the above areas; foreign language, non-doctrinal religion or philosophy

NCAA For Division II:

Students entering college in 2005 or later and who want to participate in athletics or receive an athletic scholarship during the first years must complete the following:

Students must earn a 2.0 grade point average (GPA) or better in their core courses, and earn a combined SAT score of 820 or an ACT sum score of 68. There is no sliding scale in Division II.

Students must complete 16 core courses including the following (this is a new requirement and goes into effect the Fall of 2013):

- At least 3 years of English
- At least 2 years of math (at a level of Algebra I or above)
- At least 2 years of natural or physical science (including 1 lab course)
- At least 3 years of additional courses in English, math, or natural or physical science (new requirement)
- At least 2 years of social science, and 4 additional academic courses in any of the above areas; foreign language, non-doctrinal religion or philosophy (new requirement)

Courses taken in 8th grade cannot be used to satisfy NCAA requirements. All NCAA approved courses for initial eligibility are listed in the school counseling office. Students with disabilities must be able to provide;

1. A current signed copy of a professional evaluation report that states the students disability and
2. A copy of the student's IEP or Section 504 Plan that relates to accommodations received by the student with the disability. Courses approved for students with disabilities can also be found in the school counseling office.
3. Refer to: www.eligibilitycenter.org for details

Graduation Requirements and Pathways to Graduation

New York State has introduced new options in recent years for students to meet graduation requirements. The Regents exams that have traditionally been used to satisfy the testing requirements for a Regents and Regents Diploma with Advanced Designation Diploma remain. The state has also designated additional “pathways” for students to satisfy diploma requirements, generally through some variation in required exams. While these pathways are referenced below, parents who have any questions about graduation requirements are strongly encouraged to contact their child's counselor

Course Requirements

Required Courses	Regents Diploma	Regents with Advanced Designation
English	4 Units	4 Units
Social Studies	4 Units	4 Units
Mathematics	3 Units	3 Units
Science	3 Units	3 Units
Foreign Language	1 Unit	3 Units
Health	½ Unit	½ Unit
The Arts	1 Unit	1 Unit
Physical Education	2 Units	2 Units
Electives	3 ½ Units	1 ½ Units
Total Credits	22 Units	22 Units

Testing Requirements

Students must demonstrate competency in reading, writing, math, science and social studies by passing the examinations listed below:

Criteria to earn a Regents Diploma (passing score - 65%)

1. English Language Arts Regents Examination (one exam)
2. Social Studies Examination (one exam)
3. Mathematics Regents Examination (one exam)
4. Science Regents Examination (one exam)
5. Checkpoint A for LOTE or 1 unit of high school World Language credit

AND ONE OF THE FOLLOWING:

- A score of 65+ on a fifth Regents exam in Social Studies, Math OR Science
- A state-approved Career and Technical Education assessment/pathway (the list is available from BOCES)
- A state-approved Arts or Music Pathway
- A state-approved Music Pathway
- C-DOS Pathway Career Plan (216 hours and CTE coursework, which 54 of these hours in a work-based learning experience plus the completion of an Employability Profile and Career Plan each year of High School). The 54 hours do not need to be in the same program as the coursework

Earning a Regents Diploma with Honors

Students receive a Regents Diploma with Honors by achieving a computed average of 90% or above on the required Regents Exams as referenced on the Regents Diploma requirements

Criteria to earn a Regents Diploma with Advanced Designation (passing score - 65%)

1. English Language Arts Regents Examination (one exam)
2. Social Studies Examination (one exam)
3. Mathematics Regents Examination (three exams)
4. Science Regents Examination (two exams)
5. Checkpoint B for LOTE and 1 unit of high school World Language credit

AND ONE OF THE FOLLOWING:

- A score of 65+ on a fifth Regents exam in Social Studies, Math OR Science
- A state-approved Career and Technical Education assessment/pathway (the list is available from BOCES)
- A state-approved Arts Pathway or Music Pathway
- C-DOS Pathway Career Plan (216 hours and CTE coursework which 54 of these hours in a work-based learning experience plus the completion of an Employability Profile and Career Plan each year of High School). The 54 hours do not need to be in the same program as the coursework

Earning a Regents Diploma with Advanced Designation with Honors

Students receive a Regents Diploma with Advanced Designation with Honors by achieving a computed average of 90% or above on the required Regents Exams as referenced on the Regents with Advanced Designation requirements.

Criteria to earn a Career Development and Occupational Studies Commencement Credential

A C-DOS Commencement Credential can be used as a standalone high school exiting credential that shows students meet work-readiness criteria for Special Education students only, a supplement to a high school diploma, or to help meet Regents Diploma requirements as outlined above. To successfully meet C-DOS Commencement Credential requirements, students must complete a career plan and demonstrate attainment of career exploration and development learning standards. C-DOS requirements integrate academic course work and workplace readiness skills. Students must complete the equivalent of two units of study in Career and Technical Education course work, including 54 hours of work-based learning, and at least one employability profile.

Students acquiring 5 units of credit in one of the following may be exempt from the LOTE requirement: Art, Music, or Career and Technical Education.

Endorsements (three regents examinations in Math and three in Science with an 85% or higher)

Mastery in Math and Science

For more information regarding New York Diploma Requirement, please visit:

<http://www.p12.nysed.gov?ciai/gradreq/Documents/CurrentDiplomaRequirements.pdf>

Testing Required for Graduation

1. Low Pass Safety Net Option

a. 5 required regents exams with a **55 or better (for students with an IEP or 504, when applicable).**

- i. 1 Math
- ii. 1 Science
- iii. 1 English
- iv. 1 Global History and Geography
- v. 1 US History and Government

2. Compensatory Safety Net Option

a. Scores between 45-54 on one or more of the five required Regents exams, other than the ELA or math exam, but compensates the low score with a 65 or better on another required Regents exam. Note: a score of at least 55 must be earned on both the ELA and math exams. A score of 65 or higher on a single exam may not be used to compensate for more than one examination for which a score of 45-54 is earned.

<http://www.p12.nysed.gov/part100/pages/1005.html#assessment>

<http://www.p12.nysed.gov/specialed/publications/localdiplomas-may2011.htm>

<http://www.p12.nysed.gov/specialed/publications.safetynet-compensatoryoption.html>

JR High Course Requirements

Grade 7 and 8

- 2 units of English, Science, Math and Social Studies
- 1 unit of Technology
- .75 units of Family and Consumer Science (at DCS this meets the Career and Occupational Education requirement)
- .5 units of Physical Education per year
- .5 units of Health
- .5 units of Visual Arts
- .5 units of Music

Library and informational skills 1 period per week may be contained within another course. This course should be co-taught with a Library Media Specialist and the classroom teacher to integrate instruction.

- LOTE is optional but 2 units are required at DCS
- Career Development and Occupational Education may be contained within another course (Family and Consumer Science)

Sample 7th Grade schedule	
Period 1	Math 7 or Math 8
Period 2	Science 7 or Science 8
Period 3	English 7
Period 4	Social Studies 7
Lunch	Lunch
Period 5	Tech/Art
Period 6	Music/PE
Period 7	Spanish 1A
Period 8	Fam Con/S.Hall/Band/Choir

Sample 8th Grade schedule	
Period 1	Math 8 or ALG I
Period 2	Science 8 or Living Environment
Period 3	English 8
Period 4	Social Studies 8
Lunch	Lunch
Period 5	Tech/Science Lab/Fam Con
Period 6	Health 8/PE
Period 7	Spanish 1B
Period 8	Band/Choir/Art

*Band, Choir and Art are Electives

*RtI-Students scoring a level 1 or 2 on the State Assessments or who are experiencing difficulty in Math/English may be assigned to RtI for 1-4 periods/day.

Additional Information

GradPoint

An online learning program used to supplement classroom instruction, to provide for tutoring support when a student is out of school for an extended time and to provide a pathway for students to complete coursework for credit recovery purposes. The counseling center will work with teachers, students and parents/guardians to coordinate implementation of Grad Point options as identified needs arise.

Naviance

Naviance is a college and career readiness tool that helps students navigate through their high school and postsecondary plans. Students and parents will have access to the different portals available on Naviance. Registration codes for parents and students are available through the Counseling Center.

Community Service Recognition

The Community Service Recognition program recognizes student commitment to their school and their community. Students must earn a minimum of 100 hours of community service to be eligible for this award. Students may begin accumulating service hours from the summer before they enter high school until May 1st of their senior year. Application forms are available to pick up from the Counseling Center.

Advanced Placement/UHS

DCS has numerous courses offering AP/UHS credit. Different courses have different application procedures. Presentations will be given in content classes offering advanced credit, explaining the application procedure. Students who wish to take any AP/UHS courses must take the AP exam in May and pay the UHS/AP fee when applicable.

All students interested in being in an AP/UHS course must complete the application process to even be considered for the course.

AP and UHS courses are also offered in other subject areas. Please refer to the course descriptions for application requirements.

The courses with a 1.025 multiplier are University in the High School courses. All AP courses will receive the 1.05 multiplier.

DCS +1 Program

Students at Duanesburg Jr./Sr. High School can get a jumpstart on their college education through a partnership with SUNY Schenectady. The college has expanded its offerings so students can earn an associate's degree while still in high school or within a year of graduating. Students have the opportunity to earn between 48 and 60 credits toward an associate's degree while they are still in high school. While the "DSC+1" program is designed for students to complete an associate's degree the year after they graduate from high school, students can utilize SUNY Schenectady summer programming or become full-time SUNY Schenectady students during their senior year of high school to graduate with their associate's degree already in hand. The DCS+1 program builds upon our existing College in the High School program that is offered to students in partnership with SUNY Schenectady. These courses are intended for all students, regardless of their GPA or academic goals.

College & Career Readiness

During each stage of high school, the counseling center offers a variety of programs, evening events and field trips to enhance students' knowledge and provide information on careers and colleges. Events include but are not limited to: Junior High Transition Night, Career & Technical Field Trips, Study Circles, SUNY Cobleskill College Fair, Junior and Senior workshops, Instant College Admit Days, College Caravan, and Financial Aid Night.

Freshman Year: With the guidance counselors students research careers, learn how to prepare for jobs and school. On Naviance, students fill out the Career Cluster Finder to help assess possible career interests.

Sophomore Year: Students have the option of taking the PSAT in October. In addition, sophomores can complete the Career Interest Profiler on Naviance. Sophomores also have the option of visiting CTE sites for possible hands-on career options for Junior and Senior year.

Junior Year: It is recommended for students to take the PSAT, the practice test for the SAT and possibly qualify for the National Merit Scholarship. The test is comprised of Evidenced based Reading and writing, and Mathematics. In the spring of students' junior year, it is recommended that they take the SAT or the ACT, in preparation for the admission process to college. Students interested in taking any of these exams should contact the Counseling Center for the registration information. Juniors will have an opportunity to attend the Suny Cobleskill College Fair in the fall and meet with college representatives at DCS.

Senior Year: Seniors meet with their school counselor in the beginning of the year for their senior meeting, and then throughout the year on an as needed basis, to help complete college, job or military application processes. It is sometimes recommended that students applying to college take the SAT or ACT for a second time. Students will have an opportunity to meet with college representatives at DCS.

Career and Technical Programs

Technical Education is one of several choices of study available to high school students. The major emphasis is on learning skills that will prepare students for success in today's highly technical world.

Students interested in attending a career and technical program start in their junior year.

- must have be academically on track to graduate with their cohort
- must not have excessive disciplinary referrals as reviewed by the administrative department
- students are eligible for programs at Albany and Schoharie CTE campuses as well as Mohanesen CAT building.
- Students must have good attendance.

High School Courses

ART COURSES

Art

Grade Level: 7

Students are required to complete ½ unit of study in Visual Arts. Students will explore a variety of 2D and 3D media while learning and incorporating the Elements of Art and the Principles of Design. There will be a focus on studying and investigating the work of contemporary artists and students will apply those ideas to his or her own work.

Grade Level: 8

Art 8 is a more advanced Studio before high school filling the gap between 7th and 9th grade. Students dive deeper into mediums and artistic techniques and are exposed to different cultures and artists.

Studio Art

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

This class follows state and national standards for the arts. Students will explore different areas, such as drawing, painting, 3-D work with clay and plaster textile design, commercial art, and computer graphics. Course work will contain art criticism, art history, and multi-cultural references. A sketchbook is required.

Adobe Photoshop

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

This course will introduce students to raster (photo) and vector editing programs. Students will learn ADOBE PHOTOSHOP image editing software. They will focus on digital image capturing and editing including photo compositions, cameras, and scanners. Students will learn about color in the digital realm (RGB & CMYK), capturing, importing, retouching digital images, compositing digital photos, how to add a variety of digital effects, and how to prepare their work for web and print distribution. Students will learn basic vector art production which is used for logos, animation, and commercial print, used in advertising and design.

2-Dimensional Studio (2D)

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** Studio Art

This is an advanced studio class that will build on drawing and painting skills needed for further artistic development. There will be a focus on interpreting ideas and designs onto flat surfaces. Drawing, painting, printmaking, and life sized drawings will be among the projects covered. A sketchbook is required. Class size is limited to 15.

3-Dimensional Studio (3D)

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** Studio Art, 2D Art.

This course is an advanced level course that explores several 3-dimensional media. Projects will include clay, (both hand building and wheel throwing), tile making, miniature village making, mobiles, and many other different styles of sculpture. A sketchbook is required. Class size is limited to 15.

Digital Photography

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

This course is for students to become well rounded in the fundamentals of digital photography. Four areas of construction will be emphasized: How cameras work, how composition works, how lighting works, and how to use photo basic editing software. Students will work with their personal interests and beliefs to demonstrate their knowledge and expression within the medium of photography.

Graphic Design

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

Students who take this course will explore the basics of digital art. Project examples include: creating logos and brands, magazine covers and spreads, ect. Students will work with Adobe Photoshop and other online softwares to create original designs. We will focus on the Elements of Art and the Principles of Design throughout the school year.

Industrial Design

Grade Level: 11-12 **Credit:** 1 **Prerequisite:** Studio Art, 2D Drawing/Painting, 3D

This is an advanced course directed to the career of Industrial Design. It is a hands-on advanced sculpture, graphic design, and painting course designed to meet the needs of an industrial designer. Students will learn how to design and execute drawings to final products, and

reconstruct ideas that have already been designed and make them more user friendly and modern looking. A sketchbook is required.

Senior Portfolio

Grade Level: 12 **Credit:** 1 **Prerequisite:** 3 art electives must be successfully completed, along with teacher written recommendation.

Students will be required to pursue a concentration of their choice developing a thesis consisting of at least five art projects. This is for serious art students who are trying to develop a finished portfolio. Students taking Senior Portfolio are expected to have their own agenda for this course. Students should have a clear idea of what projects they would like to complete. All projects must be approved by the art teacher before the semester begins. The teacher will work with the students to develop successful art works, but the student must have the self-discipline and motivation to work independently. This class will allow students to have a complete portfolio as well as a group of slides and a CD-ROM portfolio to hand out to colleges. Students will complete a final artist statement that describes themselves and their art influences. Class size is limited to 10.

Advanced Placement Studio Art: 2-D Design Portfolio

Grade Level: 11-12 **Credit:** 1 **Prerequisite:** 2-D Studio Art

This class is intended to address two-dimensional (2-D) design issues. For this portfolio, students are asked to demonstrate understanding of 2-D design at a college level by using such mediums as, graphic design, digital imaging, photography, collage, fabric design, weaving, fashion, illustration, painting and printmaking. Students will create a variety of different projects that will be submitted to the college board for approval.

Advanced Placement Studio Art: 3-D Design Portfolio

Grade Level: 11-12 **Credit:** 1 **Prerequisite:** 2-D Studio Art

This class is intended to address sculptural issues. Design involves purposeful decision making about using the elements and principles of art in a sculptural way. In 3-D portfolio, students are asked to demonstrate their understanding of design principles as they relate to the integration of depth and space, volume and surface. The principles of design (unity, variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, and occupied/unoccupied space) can be articulated through the visual elements (mass, volume, color/light, form, plane, line, texture). For this portfolio students are asked to demonstrate an understanding of 3-D design through any three-dimensional approach, including, but not limited to figurative or non-figurative sculpture, architectural models, metal work, ceramics, glass work, installation, performance, assemblage and 3-D fabric/fiber arts. There is no preferred (or unacceptable) style or content.

UHS ART 128

Grade Level: 11-12 **Credit:** 1 **Prerequisites:** None

The UHS ART 128 Introduction to Drawing will allow students to utilize principles and elements of art. There will be an exploration of each topic as well as the use of art history through an analysis of works of art. Students will receive 3 credits through Schenectady County Community College.

DCS Art Department Courses Offered w/ Example Sequences:

9th grade	Studio Art	1 credit
10th grade	2D Art 3D Art	.50 credit .50 credit
11th grade	Adobe Photoshop Digital Photography Graphic Design Industrial Design	.50 credit .50 credit .50 credit 1 credit
12th grade	Senior Portfolio AP Art	1 credit 1 credit

Sequence Example 1:

9th grade	Studio Art	1 credit
10th grade	2D Art (Fall) & 3 D Art (Spring)	.50 + .50 = 1 credit
11th grade	Industrial Design	1 credit
12th grade	Senior Portfolio & AP Art	1+1 = 2 credits
	Total	5 credits

Sequence Example 2:

9th grade	Studio Art	1 credit
10th grade	2D Art (Fall) & 3 D Art (Spring)	.50 + .50 = 1 credit
11th grade	Adobe Photoshop & Digital Photography	1 credit
12th grade	Senior Portfolio & AP Art	1+1 = 2 credits
	Total	5 credits

Sequence Example 3:

9th grade	Studio Art	1 credit
10th grade	2D Art (Fall) & 3 D Art (Spring)	.50 + .50 = 1 credit

11th grade	Adobe Photoshop & Graphic Design	1 credit
12th grade	Senior Portfolio & AP Art	1+1 = 2 credits
	Total	5 credits

BUSINESS COURSES

The study of business courses will prepare students for college and/or careers, and prepare them for making informed decisions in life. Knowledge of computers, careers, accounting, insurance, law, investments, and marketing are a sampling of concepts covered that will better prepare students for their future. Business courses are offered as part of career clusters or may be taken as electives.

Entrepreneurship 9-12

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

Students taking this course will focus on recognizing a business opportunity, starting a business, operating and maintaining a business. Students will be exposed to the development of critical thinking, problem solving, and innovation in this course as they will either be the business owner or individuals working in a competitive job market in the future. There will be an Integration of some accounting, marketing, business management, throughout projects in this course. Students will develop a business plan that includes structuring the organization, financing the organization, and managing information, operations, marketing, and human resources will be a focus in the course.

Math and Financial Applications

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** None

This course is a specialized interdisciplinary business course related to the mathematical learning standards. The course is designed to prepare students for both college level business programs and to understand the financial world they will encounter during their lives. As a result of taking this course, students will be: knowledgeable on matters relating to the businesses that students will someday work for and/or possibly own; capable of managing their finances including banking, investing, checking, income taxes and credit; more knowledgeable and have a greater understanding of the benefits and risks associated with home ownership; less likely to overextend their credit and become a victim of fraudulent financial practices; able to understand how to properly manage their taxes and understand the need for paying taxes to support the many public goods and services provided by the government; better prepared to handle personal and business management matters throughout their lives.

Introduction to Accounting

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** None

This course encompasses the complete accounting cycle. The main focus is developing an understanding of the basic accounting principles, methods of recording transactions, and the preparation of financial statements. The course provides students with the ability to keep business records and provides an understanding of the principles of financial transactions. Practice sets are used to give practical application of accounting theory. This course is highly recommended for students pursuing a two-or four-year business program in college.

Personal Finance

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

This course answers many real life questions: Who takes a piece of your paycheck? What do you need to know about banking on and off line? What's worth more for you-Working; College; Trade School? How to keep and manage your own money? How do you budget and prepare for your future? Students will have real world based projects focusing on topics such as banking, taxes, insurance, credit, loans, and fraud.

UHS Management - Intro to Business

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** None

This introductory course gives students a broad overview of the contemporary world of business. Topics include: fundamentals of business, business ethics/social responsibility, competing in global markets, forms of business ownership, starting and growing a business, management, and marketing (product, distribution, promotion, and pricing strategies).

UHS Principles of Marketing

Grade Level: 10-12 **Credit:** .50 **Prerequisite:** None

In this course students are introduced to the important role that marketing plays in our economic system. We will look at the basic marketing functions that may be applied to a variety of retail or wholesale industry clusters including selling, advertising, and market research. Content revolves around the basic marketing function. Selling, promotion, pricing, purchasing, product, service, idea planning, and distribution is covered. Projects are developed to give students hands-on experience using these functions. When combined with other sequence options, marketing will provide a broad background for any area within business exploration.

Succeeding in the World of Work

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** Personal Finance

Students in this course will ask themselves: What do you want to do with your life? How can you get there? This course focuses on exploration of self, career and the working world. Students will take time to reflect on their values, needs, wants and gain the knowledge and direction you need to make lifestyle, college and career choices. Students will use their skills to create a resume, and a follow up letter and develop job seeking skills such as online searching and interviewing skills. Students will discover how to be successful at work now and later.

ENGLISH COURSES

English 7 and English 8

Grade Level: 7th and 8th Grade

A reading and writing-intensive course designed to integrate basic grammar and vocabulary skills with higher-level critical analytical, comprehensive, and communication skills. Through daily practice, students will become able readers, writers, speakers, listeners, and creative thinkers.

English 9

Grade Level: 9 **Credit:** 1 **Prerequisite:** Successful completion of English 8

This course develops the reading, writing, and literature skills that students will need to meet the Common Core Learning Standards and the Regents. Heavy emphasis is placed on literary elements and the development of writing skills for Regents tasks. Major units of study include; short story, nonfiction, drama, William Shakespeare, the novel, poetry, and mythology. The main textbook, Elements of Literature-Third Course, provides much of the material with additional resources coming from novels and complementary texts.

Advanced Placement Seminar

Grade Level: 9 **Credit:** 1 **2 Year Commitment**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Students will take the AP test in May.

Advanced Placement Research

Grade: 10 **Credit:** 1 **Prerequisite:** AP Seminar

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan and implement a yearlong investigation to address a research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. Students will take the AP exam in May.

English 10

Grade Level: 10th Grade **Credit:** 1 **Prerequisite:** Successful completion of English 9.

This course introduces the 10th grade students to a variety of authors and genres with a concentration on writing and grammar. Each work of literature will culminate in a writing

assignment based on the New York State Regents mandates. The text, Elements of Literature-Fourth Course, provides most of the material in drama, poetry, and short stories. Additional full-length works will supplement the fiction and nonfiction literature. Vocabulary is taken from the context of the literature and is aligned with Global History and Living Environment curriculum. Students participate in a few miniature research assignments before participating in a required research paper in conjunction with Global History.

English 11

Grade Level: 11th Grade **Credit:** 1 **Prerequisite:** Successful completion of English 10.

This course develops the reading, writing and listening skills necessary for success on the New York State Common Core Regents in English. These skills are developed within the context of American literature. The course will instruct students on analyzing short nonfiction pieces and their application to the real world. The text, Elements of Literature-Fifth Course, in addition to providing historical context and author biography, also furnishes most of the shorter literary works: essays, drama, poems, and short stories. Text is supplemented by the study of major novels. The course provides preparation for the PSAT and SAT.

Advanced Placement English Language and Composition (AP English 11)

Grade Level: 11 **Credit:** 1 **Prerequisite:** Successful completion of English 10 with an overall average of 85% (as well as 85% on Final Exam) and obtain a teacher recommendation.

This is an intense course which prepares students to take both the English Comprehensive Regents exam in June and the Advanced Placement (AP) English Language and Composition exam in May. Students will regularly be reading two novels simultaneously, one in class and the other selected from an outside reading list. The AP English Language and Composition course is designed to help students become skills readers of prose written in a variety of periods, disciplines, and rhetorical contexts and to become skilled writers who can compose for a variety of purposes. By their writing and reading in this course, students should become aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effective writing. Students are selected for the course based on English scores, an application essay, and teacher recommendation. A contingency plan may be put in place at the teacher's discretion in order to allow students who don't qualify for admission the chance to take the course. Students taking the course must take the mandated AP exam. The AP exam is the final exam in the course. Students are required to take the AP exam in May to retain an AP designation for the course in their transcript.

English 12

Grade Level: 12th Grade **Credit:** 1 **Prerequisite:** Successful completion of English 11.

This course will cover a variety of genres throughout the course of the school year. The goal of the course is to combine several of the previously offered senior electives into one comprehensive course. Students will examine several works of classic and contemporary literature. Students will incorporate writing for life after high school, creative writing, public speaking, and interview skills into the curriculum. There is also an emphasis on project based learning using 21st Century technology.

Advanced Placement English Literature and Composition (AP English 12)

Grade Level: 12 **Credit:** 1 **Prerequisite:** Successful completion of English 11 with an overall average of 85% (and 85% on English Regents) and obtain a teacher recommendation.

This course involves intensive reading, writing, and literary analysis at the collegiate level. Reading selections are of recognized literary merit, including both fiction and critical work. The course will include ample AP Exam review and preparation. Class size is limited to 15. This course offers dual-enrollment with the two UHS courses. Students are required to take the AP exam in May to retain an AP designation for the course on their transcript.

***UHS English 12**

Prerequisite: A grade of 75 or higher on the 11th Grade Common Core English Regents Exam. UHS 123 and 124 are two separate college-level English courses taught by a local instructor through SCCC. The student who enrolls in 123 (fall) will also take 124 (spring) unless extenuating circumstances prevent him/her from doing so.

English 123: College Composition

This course provides a foundation in academic discourse by developing effective communication skills with an emphasis on expository and persuasive writing; considerable oral presentation and reflection are required.

English 124: Literature and Composition

This course encourages students to use writing to explore the ways in which literature functions as an art form. Writing and research techniques introduced in ENG 123—College Composition—are strengthened and refined.

These courses equate with three (3) college credits received from Schenectady County Community College. These credits transfer to any institution that accepts SUNY credits.

RTI

Grade Level: 9-12 **Credit:** 0

This course will help students to improve reading, writing, listening, and speaking skills. The course will target students' vocabulary, comprehension of content, grammar, sentence structure, ability to construct paragraphs, essays, and, when applicable, reports. Research skills may be incorporated if necessary.

*Scheduled on a rotating basis.

FAMILY & CONSUMER SCIENCE COURSES

Family and Consumer Science

Grade Level: 7-8

Educational discipline where academics merge with real life. This course introduces all students to the application of the process skills of communication, leadership, management, and thinking skills. This course is based on the understanding that the ability to reason, to think critically and creatively, and to reflect on one's actions will empower students to act responsibly towards themselves, their families, their peers and society. Class size is limited to 24.

Food and Nutrition

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

This course covers the following performance objectives: beginning food preparation, meal management/food purchasing, meal service, nutritional awareness, food preparation and careers in Food and Nutrition. A great amount of time is spent in the kitchen experimenting with cooking and baking. Students will have the opportunity to plan, prepare, serve, and evaluate a wide variety of foods. Students should be open to experiencing new foods. Students with diet restrictions must speak with the teacher. Class size is limited to 20.

Global & Gourmet Foods

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** Food & Nutrition

This course is an in-depth study of food and its preparation. Students will learn about advanced preparation techniques, the importance of food appearance and presentation, and the use of specialized equipment. This is a laboratory course. Students will plan and prepare at least one food item from each course of a seven-course meal. Examples; appetizers, soups, salads, entrees, breads, desserts, and beverages. Careers related to food photography, food journalism, and food styling will be discussed. Students should be open to experiencing new foods. Students with diet restrictions must speak with the teacher. Class size is limited to 20.

Interior Decorating

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

Interior Decorating will allow students to utilize principles and elements of design to home furnishings. Interior Decorating is designed to teach students how to work with materials in the home. Each module will provide students with an opportunity to develop an understanding of the techniques necessary to create a project in that category. Careers will be discussed relating to interior design. Class size is limited to 20.

Parenting

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

The purpose of this course is to empower students to knowledgeably explore and define their personal values concerning parenting and to become knowledgeable of the responsibilities of becoming a parent. Most students will one day become parents by choice or chance. This course is designed to empower students with essential knowledge of the economic, social, educational, and physical impacts of parenting. Students will recognize that parenting requires adjustments in lifestyle and careers. Students will become aware of the stages of child development and the specific demands of each stage of development. Class size is limited to 20.

Independent Living:

Grade Level: 10-12 **Credit:** .50 **Prerequisite:** None

The Independent Living course is designed to prepare students for the realities and responsibilities of managing all aspects of adulthood: education, career, interpersonal relationships, civic involvement, and financial security. Students will need the ability to make knowledge-based decisions as they learn to navigate the demands of the 21st century. For example, advances in technology provide consumers with almost limitless choices, but along with this wide array of choice comes an increasing need for significant knowledge and

self-discipline. Financial transactions that can be made instantaneously can have long-ranging effects, both positive and negative. Personal and professional communications that can be shared worldwide with one keystroke need to be thoughtfully developed and distributed. In short, defining one's lifestyle goals and developing a plan to attain them is the core of this course. Class size is limited to 20.

HEALTH & PHYSICAL EDUCATION COURSES

Health 8

Students will gain knowledge and skills necessary to make informed choices about current major health concerns identified by the Center for Disease Control and Prevention. The following topics are included in the curriculum; personal health and wellness, mental and emotional health, healthy eating, physical activity, safety, sexual health, violence prevention, and a drug-free lifestyle. Students will gain the necessary knowledge and skills through a variety of instructional methods that are interactive and relevant to students' lives. The New York State Education Department requires all students to receive two half-year courses of health education. This is the first of two courses required by the New York State Department of Education. The second course will be offered in high school.

HS Health

Grade Level: 10-12 **Credit:** .50

This class is a realistic view of ongoing issues in Health Education to best prepare the students for health issues they may face later in life. This class places strong emphasis on promoting healthy lifestyles through various health topics. Students will gain knowledge through a variety of learning styles such as projects, posters, individual and group presentations, lectures, class discussions, videos, and guided research. Students will be made aware of choices they will have to make regarding their health and safety. Topics that will be covered are; physics, mental, emotional and social health, communication skills, bullying, stress, goal setting, time management, substance use and abuse, smoking and other forms or tobacco, sexuality, parenting, unintentional/intentional injuries and diseases, personal hygiene, fitness, nutrition, and basic first aid skills. This class complies with both New York State and National Health Education Standards and is required for graduation.

Life in the E.R

Grade Level: 10-12 **Credit:** 1

This course will show what life would be like working in a medical profession. Students will be made aware of the pressures of the field along with gaining better insight on whether or not the field is something they want to pursue further. They will be given an honest perspective on what they would need to accomplish in preparation for these kinds of professions including the needed education, college programs available and testing certifications. In learning what the job description entails, some of the top needed skills will be discussed, along with which personalities work best for each position. Students will research what the daily working conditions would be like, along with job characteristics. Annual job earning and annual job openings will be explored. Students will learn which jobs are up and coming in growth, as well

as the jobs that are dying out, and to prepare them for the future. After learning the education requirements for the careers and getting an overview of job expectations, local members of the medical profession will be invited to come to Duaneburg to share their experiences with the students. Students will be encouraged to ask questions to get a better insight of whether or not this is the profession they would like to study. Students will also be required to do research on current events occurring in that profession and have classroom discussion on what they have learned. Field trips will take place so students may have an opportunity to see what their potential place of employment might look like. Potential one-day internships may also occur depending on availability of willing professionals.

Outdoor Education

Grade Level: 9-12 **Credit:** .50

This class is intended to teach students leadership skills in the area of outdoor education, lifelong fitness, and health and wellness. Students will gain confidence in demonstrating outdoor leadership skills and will be able to successfully lead others in a variety of outdoor activities and participate in various lifetime sports and activities. Students will participate in a variety of experiences both on and off school campus that will promote positive mental health and will engage in health lessons that pertain to knowledge necessary to live a long, healthy life.

JR HS Physical Education

Students are required to take .5 unit of study in Physical Education each year. Classes meet every other day. Students will have the knowledge and skills to maintain physical fitness, participate in physical activity, and maintain personal health. The mission of Physical Education is to empower all students to sustain regular, lifelong physical activity as a foundation for a healthy, productive and fulfilling life. This is a sequential educational program. It is based on individual and team physical activities undertaken in an active, supportive, and non-threatening atmosphere in which every student is challenged and given the opportunity to succeed.

HS Physical Education

Grade Level: 9-12 **Credit:** ½ Unit

Physical Education is a NYS mandated class that each student must pass each year that they attend middle and high school. PE classes meet every other day. Students will acquire the knowledge and skills to maintain physical fitness, participate in physical activity, and maintain personal health.

MATH COURSES

Math 7

Grade Level: 7

This course follows the 7th grade NYS CCLS Modules. At the end of the year, there is a final exam that counts for 20% of the final grade.

Math 8

Grade Level: 8

Students will build on concepts presented the previous year. These concepts are Algebra and Geometry. The goal is to prepare the 8th grade students for the Algebra class they will encounter in their first year of high school.

Algebra I

Grade Level: 9-10 **Credit:** 1

This is the first of a three-year sequence which includes Algebra I, Geometry, and Algebra II. Algebra I will develop study skills and processes to be applied using a variety of techniques to solve problems in a variety of settings in accordance with the CCLS and PARCC. Topics will include linear equations, quadratic and exponential functions, systems of equations, graphing, coordinate geometry, and data analysis. Students are required to take the Algebra I Regents exam.

Non- Regents Geometry

Grade Level: 9-11 **Credit:** 1 **Prerequisite:** Teacher Recommendation

This is the second year in a sequential math program. It is built around five process strands: problem solving, reasoning and proof, communication, connections, and representation as well as five content strands: number sense and operations, Algebra, Geometry, measurement, and statistics and probability. Topics covered include congruence, similarity, right triangles, Trigonometry, circles, expressing geometric properties with equations, and geometric measurement and dimensions. An in-class final exam is given at the end of the year. No Regents credit will be earned.

Geometry

Grade Level: 9-11 **Credit:** 1 **Prerequisite:** Successful completion of Common Core Algebra (including passing the Regents exam).

This is the second year in a sequential math program. It is built around five process strands: problem solving, reasoning and proof, communication, connections, and representation as well as five content strands: number sense and operations, Algebra, Geometry, measurement, and statistics and probability. Topics covered include congruence, similarity, right triangles, Trigonometry, circles, expressing geometric properties with equations, and geometric measurement and dimensions. Students are required to take the Common Core Regents exam.

Algebra II (Common Core)

Grade Level: 10-12 **Credits:** 1 **Prerequisite:** Successful completion of Geometry and passing the Regents exam with a 65 or higher.

This is the third year in the sequential math program. It is built around five process strands: problem solving, reasoning and proof, communication, connections, and representation as well as five content strands: number sense and operations, Algebra, Geometry, measurement, and statistics and probability. Topics include linear, quadratic, polynomial, exponential, logarithmic, rational and radical functions and relations, discrete mathematics (sequences and series, probability and statistics) and trigonometry. Students are required to take the Algebra II Regents.

***UHS Pre-Calculus**

Grade Level: 11-12 **Credits:** 1 **Prerequisite:** Successful completion of Common Core Algebra II and passing the Regents exam with a 65% or higher.

This is a course for the preparation of Calculus. Topics include (as time permits); functions (polynomial, exponential, logarithmic, and trigonometric), continuity, limits, inequalities, linear programming, matrix algebra, sigma notation, advanced algebra, Euclidean geometry, conic sections, and polar coordinates. Some special topics include the use of graphic calculators and advanced problem solving.

***UHS Calculus**

Grade Level: 12 **Credits:** 1 **Prerequisite:** Successful completion of Pre-calculus and passing the final exam.

This class is comparable to a first semester calculus course for mathematics and science majors. Some topics included are limits, differentiation and its application, integration and its application, logarithms and exponential functions, inverse trigonometric functions, and hyperbolic functions. Students are required to take the AP exam in May to retain an AP designation for the course on their transcript.

Math 12

Grade Level: 12 **Credits:** 1 **Prerequisite:** Senior status

This is a fourth-year course designed to review and continue practicing mathematical skills. The course will include topics such as straight lines and linear functions, systems of linear equations and inequalities, matrices, mathematics of finance, sequences and series, probability, real numbers, area, perimeter, volume, and surface area of geometric figures, solving equations, graphing functions, basic differentiation. Students should have a scientific calculator.

RTI for Math

Grade Level: 7-9

This course will help students to improve math skills. This course will target math deficits and help improve math comprehension. *Scheduled on a rotating basis.

MUSIC COURSES

JR HS Band

Grade Level: 7-8

Musical styles include; march, pop, classical transcriptions, novelty, holiday, solo, and contest. All standard band instruments plus electric/acoustic bass and piano/keyboard are welcome. Lessons are given in small groups during study halls or on a rotating basis depending on the student's schedule once every four days. Grades are based on performances, rehearsals, lesson book progression, and scales throughout the school year. Beginners are welcome.

JR HS Choir

Grade Level: 7-8

Provides a variety of singing opportunities for students with limited formal choral experience. It is an introduction to vocal music at the JR High level and a preparatory experience for the performing choirs at Duanesburg. Vocal techniques and music reading are emphasized and students are given the opportunity to explore various musical sources and styles. Much emphasis is placed on providing a positive musical experience to students through classroom and concert performance. There are two concerts each school year, one in December and one in May.

General Music

Grade Level: 7-8

Jr. High General music meets every other day for a full year. This class meets the state mandates for general music at the Jr. High School level. The student earns 1/2 credits for their graduation requirement. Units covered in General Music include: Music Awareness, Music around the world, Elements of music, Music Theory (Composition), Musical Theater, Vocal Music , Music History (History of pop music), Piano keyboards, Guitars and Careers exploration.

HS Band

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

Musical styles include march, pop, classical transcriptions, novelty, solo and contest. All standard band instruments plus electric/acoustic bass and keyboard are welcome. Lessons are given in small groups on a rotating basis once every 4 days during a regularly scheduled class or during study hall. Grades are based on performances, rehearsals and lessons throughout the school year.

HS Chorus

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

The **Choral** Music program is designed to enhance the musical, creative and expressive qualities of all students. The high school **choir** class is designed for students to apply musical skills as they continue to create and experience music as a musical ensemble. A variety of music will be performed.

Introduction to Theater

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

Students will create and perform theater pieces as well as improvisational drama. They will understand and use basic elements of theater in their characterizations, improvisation, and playwriting. Students will engage in individual and group theater related tasks, describe various roles and means of creating, performing and producing theater.

Music Theory & Composition

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** Prior band, choir or other music knowledge

This is an upper level course designed for students interested in attending a music college. Ear training includes sight singing, melodic, rhythmic and harmonic recognition. Construction of major and minor scales and chords will also be taught. Students will be introduced to music history from The Renaissance to the present day. During the year they will compose several pieces of music in different styles with increasing levels of difficulty.

Guitar Techniques

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

This one-year course is designed for students with no previous guitar experience. Students will receive guidance and direction in solving problems related to playing the guitar at a beginning level and will learn many of the different styles, skills, and techniques required to become a successful guitarist. Areas of concentration include: correct posture, note reading, aural skills, flat-picking, accompanying songs, rhythmic patterns, chord study, and finger picking styles, musical forms, and improvisation and performing experiences.

SCIENCE COURSES

Science 7

Students will cover major branches of life science: cell physiology, microbiology, botany, zoology, human physiology, genetics, and ecology. The course is designed to nurture a greater awareness and appreciation of science through the excitement of first hand discovery, while integrating science skills, problem solving skills and study skills within the content and standards. Special attention will be given to lab skills and processing skills. It should be noted that the seventh graders will be taking the state exam at the end of their eighth grade year. Project based learning will be used throughout the year. Grades are achieved through points earned on assignments, class participation, tests, quizzes, and projects. Grades are calculated on a total point basis. Textbooks focus on listening skills, note taking, and organization. The books come with a CD version and can be accessed online.

Science 8

Students will cover major branches of physical science. Topics would include chemistry basics, physics basics, scientific method, careers in science, and technology. The course is designed to nurture a greater awareness and appreciation of science through the excitement of first hand discovery, while integrating science skills, problem solving skills and study skills within the content and standards. It should be noted that students will be taking a state exam in two parts this year. The first part is the performance portion to be scheduled in May, the written portion is after the performance portion in early June.

Living Environment

Grade Level: 8-12 **Credit:** 1

This course builds on Standards 1 and 4 of the New York State **Learning Standards for Mathematics, Science and Technology** which emphasizes science inquiry and learning biological concepts that include the similarity and diversity of life forms, molecular genetics, evolution, reproduction and development, biochemical processes, ecology including energy relationships, and human activities affecting the environment. As a prerequisite for admission to the Regents exam, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation. All students enrolled in Living Environment must be concurrently registered for Living Environment lab. Lab is an additional class above and beyond the Living Environment class.

Transitional Living Environment

Grade Level: 9 **Credit:** 1 Teacher Recommendation Only

Transitional Living Environment is an incrementally paced science course designed to reinforce foundational skills, science practices and communication to prepare students for success in regents sciences. This standards based course is geared toward covering the necessary topics, labs and skills that are aligned with The Living Environment course over a two year period.

Physical Setting/Earth Science

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** Successful completion of Living Environment or Administrator's permission.

This course addresses the content and process skills as applied to the rigor and relevance to be assessed by the Regents exam in Physical Setting/Earth Science. Focus will include understanding and demonstration of important relationships, processes, mechanisms, and applications of Earth Science concepts. Students will be able to demonstrate those explanations in their own words, exhibiting creative problem solving, reasoning, and informed decision making. All students enrolled in Earth Science must be concurrently enrolled in Earth Science lab. Lab is an additional class above and beyond the Earth Science class. Critical to understanding science concepts is the use of scientific inquiry to develop explanations of natural phenomena. As a prerequisite for admission to the Regents exam, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation. Prior to the written portion of the Regents exam, students will be required to complete a laboratory performance test.

Non-Regents Earth Science

Grade: 10 **Credit:** 1 Teacher Recommendation Only

Non Regents Earth Science is a non-lab science class that will cover many of the topics needed as a basis for other science courses. Topics to be covered include the Nature of Science, Minerals and Rocks, Surface Processes, Plate Tectonics, Weather, Climate, and Astronomy. There will also be an emphasis on basic science skills such as graphing, data collection and analysis

Physical Setting/Chemistry

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** Successful completion of Algebra I, Living Environment and Earth Science or teacher recommendation.

This course is the study of composition, structure and properties of matter, the changes which matter undergoes, and the energy involved in such changes. Topics include; subatomic particles, atomic structure, the Periodic Table, bonding, chemical formulas, nomenclature, chemical reactions, stoichiometry, acids/bases, electrochemistry, radioactivity, and organic chemistry. As a prerequisite for admission to the Regents exam, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation. All students enrolled in the Chemistry course must be concurrently enrolled in Chemistry lab. Lab is an additional class above and beyond the Chemistry class.

Contemporary Issues in Science

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** Living Environment

The emphasis will be on real world applications and the impact of current issues in science on daily life. We will explore from the lens of the Democratic and Republican Party's Platforms and discuss how politics affects the scientific community and our natural world. Topics that may be explored include: global warming, acid rain, pollution, natural resources, agriculture, and medicine. There is no separate lab.

Physical Setting/Physics

Grade Level: 11-12 **Credit:**1 **Prerequisite:** Successful completion of Algebra I, Living Environment, Earth Science and Chemistry or teacher approval.

This course involves the study of matter and energy. Topics include: linear motion, forces, vectors, projectiles, gravitation, uniform circular motion, momentum, energy, electrostatics, DC circuits, wave theory, and atomic and nuclear theories. There is a lab requirement. This course is required or recommended for many fields of continuing education. As a prerequisite for admission to the Regents exam, students must have successfully completed 1200 minutes of laboratory experience with satisfactory written reports for each laboratory investigation. All students enrolled in the Physics course must be concurrently enrolled in Physics lab. Lab is an additional class above and beyond the Physics class.

Forensics Science

Grade Level: 11-12 **Credit:**1 **Prerequisite:** Successful completion of two years of high school science including Living Environment.

This is a full-year course which incorporates math, biology, chemistry, physics, and writing skills to frequently solve mysteries. Forensic Science will include hands-on activities, labs, interactive computer activities, other readings, worksheets, and PowerPoint Presentations on topics including; trace evidence including hair, fiber and pollen; time of death determination using insects and rigor mortis; blood typing and spatter analysis; DNA fingerprinting analysis; impression evidence including fingerprint, foot, dental, tire and tool, bone analysis and osteobiography; ballistics; glass analysis and more.

UHS Environmental Science

Grade Level: 11-12 **Credit:**1 **Prerequisite:** Successful completion of Algebra I, Living Environment and Earth Science OR teacher approval.

This course introduces students to environmental concepts and issues from an interdisciplinary approach. Environmental issues and controversies will be explored from ecological, biological, social, economic, ethical, and governmental policy positions. Students will gain an

understanding of the basic scientific method, tools, and techniques needed to understand and analyze environmental issues such as population growth, resource depletion, industrial and municipal pollution (air, water & trash), climate change, alternative energy and sustainability. Students are required to make several field trips to environmental sites as part of this course and will complete a project dealing with a current local environmental issue.

Advanced Placement Biology

Grade Level: 11-12 **Credit:** 1 **Prerequisite:** Living Environment and Chemistry

In this course students will cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes-energy and communication, genetics, information transfer, ecology, and interactions. The course is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. The following are Big Ideas: 1) The process of evolution explains the diversity and unity of life, 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis, 3) Living systems store, retrieve, transmit, and respond to information essential to life processes, 4) Biological systems interact, and these systems and their interactions possess complex properties.

Anthropology

Grade Level: 11-12 **Credit:** 1

This course is an introduction to the discipline of anthropology as a whole. It presents students with an introduction and overview of the four major sub-fields of the subject: archaeology, biological anthropology, cultural anthropology, and linguistics. In this class emphasis will be placed on the holistic nature of the discipline. Students will explore various research methods of the 4 major disciplines. Students will explore current and past cultures around the world with an emphasis on regional differences in cultural practices. Students will engage in archaeological practices used by professionals in the field as they explore past human civilizations and the development of society. Students will explore theories of evolution and human anatomy as it relates to biological anthropology. Students will explore the development of language as well as compare the differences of regional vocabulary and lexicon.

SOCIAL STUDIES COURSES

Social Studies 7

Grade Level: 7

This is the first year of the Jr. High American History course for 7th and 8th grades. Students will examine key events and explore the effects these events have on everyday life and people. The year will begin with a review of geography: location, place, interaction, movement, and region. Units of study will include Native Americans, Exploration and Colonization, War of Independence, the New Nation, the US Constitution, Manifest Destiny, and the Civil War.

Social Studies 8

Grade Level: 8

Eighth grade Social Studies is a focus on American History and is the second year in a two-year curriculum on US History and Geography. Students will learn about the time period beginning after the American Civil War and continuing through modern times. There is an increased emphasis on writing and the development of critical thinking skills, including work with document-based questions (DBQs) and essays. A variety of media are used in the classroom such as historical documents, video, and artifacts.

Regents Global History and Geography 9

Grade Level: 9 **Credit:** 1 **Prerequisite:** None

This course is the first part of a two-part course designed to show students common themes that recur across time and place over historical eras. Themes include cultural diffusion, migrations, regional empires, belief systems, trade and conflict. The curriculum provides students with the opportunity to explore what is happening in various regions and civilizations in the world at a given time. Students will also develop social science skills by working with a variety of historical documents. In addition, the course enables them to investigate issues and themes from multiple perspectives and make global connections and linkages that lead to in-depth understanding.

Regents Global History and Geography 10

Grade Level: 10 **Credit:** 1 **Prerequisite:** Successful completion of Global 9

As an extension of Global History 9, this course continues to examine the progression of events and ideas that have shaped the modern world. The course begins approximately 1200 CE, and concludes with an examination of contemporary issues such as globalization, hunger, population growth, the environment, and the impact of science and technology. The culmination of the Global History course is the administration of the Global History and Geography Regents examination to all students in June. Achievement of New York State established levels of competence on the exam is a high school graduation requirement.

Advanced Placement World History

Grade Level: 10 **Credit:** 1 **Prerequisite:** Teacher recommendation, overall end of the year GPA of 85% or better in Global 9 and an 85% or better on the 9th grade Global Studies final exam.

This is a year-long course that covers the history of humanity from the 1200's to the modern day. Students will be expected to fulfill the requirements of the Regents syllabus in World History in addition to taking the AP exam in World History administered by the College Board (fee). Major areas of study will include the interaction of human groups across time through trade, war, and climate shifts. Particular attention will be paid to the development of major world religions and gender roles that developed in various societies. Students are required to take the AP exam and are responsible for the payment of the examination fee. The exam will be held in May. After the AP exam, students will use the final month of the school year to prepare for the New York State Regents examination in World History and Geography. Students are required to take the AP exam in May to retain an AP designation for the course on their transcript.

Regents U.S. History and Government

Grade Level: 11 **Credit:**1 **Prerequisite:** Successful completion of Global 10 or AP World History

United States History is a narrative of a great experiment in representative democracy. The basic principles and core values expressed in the Declaration of Independence and the United States Constitution became the guiding ideals for the nation's civic values. The curriculum is organized into units that examine the political, social, economic, and cultural heritage of the United States. Students will be expected to read and analyze historical documents and write document-based essays/thematic essays during the year in preparation for the Regents exam. The Regents exam will be based on the content column in this core curriculum and is required for all students.

Advanced Placement US History

Grade Level: 11 **Credit:** 1 **Prerequisite:** Teacher recommendation, review of writing samples, an average of 85% or better for the first three quarters in social studies and an overall end of year GPA of 85%.

This is an in-depth college level course designed for students with a special interest and ability in U.S. History and other Social Science disciplines. It is ideally suited for, although not limited to, the student who plans to major in Social Science in college. It is a full-year college introductory course in U.S History from colonial times to the present. The course will provide an examination of U.S. political institutions and behavior, public policy, social and economic change, diplomacy and international relations, as well as cultural and intellectual development in U.S. history. Essay writing is essential and emphasized. Students will be required to analyze historical evidence and primary sources throughout the course. While students receive 1 unit of credit for New York State, it should be noted that this course consists of two half-year courses which yield six credit hours at SCCC. Students are required to take the AP exam in May to retain an AP designation for the course on their transcript.

UHS Sociology

Grade Level: 11-12 **Credit:** 1 **Prerequisite:** Successful completion of Global History 10, the Regents exam, and an overall GPA of 80% for previous social studies class.

Sociology is the study of society and how it functions. Students will study the fundamentals of sociology including topics in deviance, social class, power, gender, race and family. The course will also investigate the problems facing the United States and other nations in these areas.

There is a final exam in June. This is a three-credit course offered through SCCC.

History through Archaeology & Art

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

This course is designed to introduce students to the field of archaeology. Archaeology is the systematic study of past human life and culture by the recovery and examination of remaining material evidence, such as buildings, tools, pottery, works of art and other artifacts. In exploring social studies content, this course will emphasize critical thinking skills, experiential learning, and connections between several disciplines of study.

Participation in Government

Grade Level: 12 **Credit:** .50 **Prerequisite:** Successful completion or concurrent with American History.

Participation in Government (P.I.G.) will emphasize the nature of the citizen's role in a democracy and will provide students with tools and techniques necessary to fulfill that role. Emphasis will be placed on defining and understanding responsible citizenship, civic engagement, rights and responsibilities, public policy issues, and methods of participation in the public policy-making process. The course will draw on life experience beyond the classroom and school and will be related to problems or issues addressed by students at the local, state, national and global levels. **Course is required for graduation.

Economics

Grade Level: 12 **Credit:** .50 **Prerequisite:** Successful completion or concurrent with American History.

This course will stress the basic economic concepts and understanding which all people need to function effectively and intelligently both as citizens and participants in the economy of the United States and the world. Specifically, students will learn the basic theories behind the operation of a market economy (capitalism) and will understand and be able to evaluate the government's role in regulating the economy. Students will also study consumer and financial literacy related topics such as savings, investing, budgeting, and the use of credit. The course will emphasize a rational decision-making process which can be applied to all economic decisions. **Course is required for graduation.

Advanced Placement United States Government & Politics

Grade Level: 12 **Credit:** .50 **Prerequisite:** Teacher recommendation, an average of 85% or better for the first three quarters in social studies and an 85% or better on the US History and Government Regents.

This course will give students an analytical perspective on government and politics in the United States. It includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute the U.S. government and politics. Students will become acquainted with the variety of theoretical perspectives and explanations for various behaviors and outcomes. Students successfully completing this course will:

- know important facts, concepts, and theories pertaining to U.S. government and politics
- understand typical patterns of political processes and behavior and their consequences (including the components of political behavior, the principles used to explain or justify various government structures and procedures, and the political effects of these structures and procedures)
- be able to analyze and interpret basic data relevant to U.S. government and politics (including data presented in charts, tables, and other formats)
- be able to critically analyze relevant theories and concepts, apply them appropriately, and develop their connections across the curriculum.
- be familiar with and analyze 9 required foundational documents and 15 required landmark supreme court cases.

The following topics will be covered: constitutional underpinnings of United States Government; political beliefs and behaviors; political parties, interest groups and mass media; instructions of national government; and Civil Rights and Civil Liberties. Students are required to take the AP exam in May to retain an AP designation for the course on their transcript.

Senior Seminar: The College Process

Grade Level: 12 **Credit:** .50 **Senior Seminar Requirements:** College Bound Seniors

The College Admissions Process has often been identified as the most complex responsibility facing parents and seniors in high school. This course is designed to inform students and their parents of the college process. We will answer the basic questions of where to go to college and the differences between them, all the way up to the Index to College Majors. Students will be given time to work on college applications, scholarship opportunities, and learn about college life. There is no single correct way to approach the process, but knowing what is expected will help. The course is a half year class that is graded by Pass or Fail. Attendance, applications, and participation will be the basis for passing the class. This will be a half year course for any college bound senior.

Psychology

Grade Level: 11-12 **Credit:** .50

This course is an introduction to the nature and scope of the field of psychology as a scientific and human endeavor. Topics within this course will focus on individual behavior and why an individual thinks, feels, and reacts to certain stimuli. Emphasis will be placed on research methods, stages in childhood and adolescence development, how the brain works, altered states of consciousness, psychological testing, and psychological disorders.

TECHNOLOGY COURSES

Technology

Grade Level: 7-8

- Measurement - Students will learn how to read and use both the English and Metric Systems of measurement. They will use their measurement skills in building a project at the end of the unit.
- Electricity and Lasers - Students will learn about parallel and series circuits. The difference between electricity and electronics will be discussed. An explanation of lasers and their applications will be included in this unit. The students will use computer software to design and test electrical circuits, as well as laser circuits. Actual low voltage electrical circuits may also be built.
- Manufacturing Processes - Students will learn the steps in the manufacturing process and the specific types of processes used in changing raw or manufactured materials into finished products. Students will design, build and race their cars at the end of the unit.
- Technological Systems - Hydraulics and pneumatics systems are examined. The difference between open and closed systems are discussed. Students will look at how robotics incorporates into these systems. The unit culminates with the students building a robotic arm using the concepts of hydraulics and pneumatics.
- Environmental Technology - Students will learn about different energy sources such as geothermal, solar, wind power, fuel cells, battery power and more. Students will complete projects on solar vehicles and wind turbines
- Appropriate Resources and Problem Solving - Students will learn the seven technological resources and how they can be used. Students will learn the steps in problem solving. The final

project for this unit is for students to design a city layout utilizing their resources, problem solving skills and budgeting.

- **Transportation and Flight** - The major topics include the differences between gasoline and diesel engines, how engines work, aerodynamics, and the difference between liquid and solid fuel rocket engines. Students will build their own rockets and then launch them outside on the soccer field.
- **Drafting and Sketching** - Students are introduced to sketching, drafting practices, and multi-view drawings. CAD will be introduced and used by students. There are many scale sketches in this unit.
- **Communication and Multimedia** - Communication forms such as radio and television are examined as to how they work. AM and FM radio signals are discussed as to their differences and advantages. If time, students will create a radio show or a television commercial using the media studio in school. Students may also take part in a Student Town Meeting radio program at WAMC in Albany.
- **Construction** - Students will examine large building structures such as bridges, dams, and skyscrapers as to how the four structural forces act upon the structures. Different types of building materials are discussed. This unit will also cover residential building. Students will build a bridge of their choice or a scale house to complete the unit.
- **Forensics** - Students will learn what the study of forensics is; how DNA is used in crime solving and how the proper crime scene securing is discussed. Final activity for this unit is examining a crime scene and trying to formulate a solution for the crime.
- **Nanotechnology** - Students will learn what nanotechnology is and why it is the fastest growing field in the world today. They will be examining how objects are created at the atomic level and what the uses are possible benefits will be. How nanotechnology is changing the engineering field and employment picture in the world will also be examined. The unit will culminate with a hands-on activity to demonstrate how nanotechnology can and will be used in the near future.

Basic Electricity

Grade Level: 9-12 **Credit:** .5 Electricity is used everywhere from small engines and cell phones to lights in our home. In this course students will learn the basics about electricity and electronics that we use in our everyday lives. Topics of study are DC current, wiring, soldering, car audio, generators, amplifiers, speakers, cell phone repair, batteries and chargers.

Design and Drawing for Production (DDP) (Introduction to Engineering Design)

Grade Level: 9-12 **Credit:**1 **Prerequisite:** Students need a strong math and science background. This course emphasizes the development of a design. Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. Students work both individually and in teams to design solutions to a variety of problems using 3D modeling software, 3D printers, and use an engineering notebook to document their work.

UHS Introduction to Computer Science with Multimedia

Grade: 10-12 **Credit:** 1

This Siena College dual-enrollment course is a broad introduction to a variety of fundamental topics in computer science through the theme of multimedia. Using the Python programming language, students write programs that operate on images, sounds, and animations. Students are

also introduced to important computer science topics including data representation, computer organization, history and societal impact of computing, and artificial intelligence. Students taking this course at the high school can earn 3 college credits for a (flat) \$200 tuition rate.

Digital Media Production

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

Students should be capable of passing the ADOBE PREMIER PRO professional certification exam after this course. Students will take more of a leadership role by developing, directing, producing, and coordinating projects for school functions. They will learn about projects from concept to completion by working on school media projects including standard fundraiser commercials as well as sports, concerts, grants and other requested items.

Video Game Development & Design I

Grade Level: 9-12 **Credit:** .50 **Prerequisite:** None

Students will learn the basics of computer programming, design and make their own games using a user-friendly Graphic-User-Interface (GUI). Students may use a variety of software packages depending on what they are trying to achieve. Students will design a back story, characters, levels, and then program them. This is a developing course and may change according to the needs of students.

Video Game Development & Design II

Grade: 9-12 **Credit:** 1 **Prerequisite:** Video Game Development & Design I

Students in this course will build off the knowledge gained and skills developed in the Video Game & Development I course. This course will involve programming using a Graphic User Interface (GUI), Unity and C++ Visual Studio. Students will collaborate to create a complete video game that is similar to those that are commercially available.

Construction and Property Management

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

This course provides the study of light frame construction techniques, which covers common residential construction materials, components, and systems as related to wood frame structures. Students will learn about residential structures by building models and completing a full-sized building project to study the applications of various construction techniques. The residential construction process will be analyzed from site planning to finish construction. The course may also include editing related specifications and determining cost estimates. Students will experience working outside through the end of the semester. Activities include blueprint reading, masonry work, floor, walls, interior and exterior finishing, and roof framing. Students will work on a group project to apply their construction skills.

Introduction to Fine Carpentry

Grade Level: 10-12 **Credit:** .50 **Prerequisite:** None

This course is an introductory half-year course that is designed to offer a broad-based view of how people change or process wood materials. Students will complete a variety of projects using various tools and machines to teach them the fundamentals of material processes. This course

provides a valuable experience to students interested in bettering hands-on working skills. The entire semester will be spent in the technology shop, building and manufacturing projects.

Advanced Fine Carpentry

Grade Level: 10-12 **Credit:** .50 **Prerequisite:** Intro to Woodworking

This course is designed to be an extension course for students who have completed Introduction to Woodworking. Students will work on more advanced types of projects to build on their woodworking skills and experiences. Complete plans, drawings, and material lists will be required from students for each project. A lab fee could be required depending on the choice of materials that the students choose for projects.

Introduction to Robotics

Grade Level: 10-12 **Credit:** 1 **Prerequisite:** None

This course covers the basics of the ever-growing field of robotics. From programming to metal working, from robot-design to automated systems, this full-year course offers students a hands-on look at robotics. Students will build an automated fish hatchery along with designing and building a variety of robotic vehicles. Topics of study will be: basic metalworking, welding, programming, wiring, electricity/electronics, sensor integration, and automation. This course is open to all students.

Transportation Systems: Energy & Power

Grade Level: 9-12 **Credit:** 1

This is an introductory course designed to familiarize students with the range of methods used to move people, products and materials across the land, ocean and sky. This course will meet every day for the entire school year and will have components of lecture and laboratory. During the first half of the year, students will learn about the theoretical underpinnings and scientific principles of various transport systems. Students will investigate a variety of energy and propulsion systems. Students will gain design experience and insight into a variety of transportation vehicles/systems by constructing practical working models. Students will utilize the principles of design to optimize their transport vehicles. *During the second half of the year, students will learn about automotive design, function and repair. Students will learn the fundamentals of 2-stroke and 4-stroke engine theory and will disassemble, troubleshoot and reassemble small engines. Successful completion will yield a functioning engine. Depending on time and circumstance, students may be able to bring in their own small engines to perform troubleshooting and maintenance

WORLD LANGUAGE COURSES

To earn a New York State High School diploma, students must earn at least one credit of HS world language. This can be done either by passing the local comprehensive exam at the end of checkpoint A in 7th and 8th grade language, or by passing a year of HS language course. Many colleges require a 2, 3 or 4 year language sequence.

Spanish 1A

Grade Level: 7

The focus of the first year of Spanish is to begin communicating in the target language by learning the basic vocabulary and structures that lead to proficient communication. A special emphasis is placed on the culture of Spanish-speaking countries. Successful completion of level 1A is necessary to continue to Level 1B.

Spanish 1B

Grade Level: 8 **Prerequisite:** Spanish 1A

Students are expected to be able to carry on a simple conversation in the Spanish Language. More complex vocabulary and sentence structure will be mastered through oral and written exercises. Both levels 1A and 1B, as well as the successful completion of Comprehensive Final Examination, students will earn one high school credit. This will fulfill the World Language minimum requirement for high school graduation.

Spanish Culture

Grade Level: 9-12 **Credit:** 1 **Prerequisite:** None

This class explores Spanish/Hispanic holidays, artists, sports figures, business people, politicians, and educators that have shaped and are shaping Hispanic culture in our country. The students will also study the development of the Spanish language and its world influence. Other topics include: history, architecture, art, literature, geography, and the influences of the Arabic, Christian and Jewish culture, foods throughout the Spanish-speaking world and other topics that may be of interest to the students.

Spanish II

Grade Level: 9 **Credit:** 1 **Prerequisite:** Spanish 1B

Presents a more complex structure of basic Spanish and expands the cultural themes of the first level. By the time students complete Spanish II, they will have acquired a command of the key vocabulary and structure necessary for personal communications as well as an appreciation of the culture of the Spanish-speaking world. For students who successfully completed Spanish 1B. After successfully completing Spanish II, students will have earned two Foreign Language credits.

Spanish III

Grade Level: 10 **Credit:** 1 **Prerequisite:** Overall average of 75% in Spanish II

This class provides students with opportunities to review, deepen their understanding of Spanish as they sharpen their communication and comprehension skills, and enrich their vocabulary through realistic dialogues and a variety of activities. At the completion of this year, students will take a comprehensive exam. This class is for students who successfully completed Spanish II.

***UHS Spanish IV**

Grade Level: 11 **Credit:** 1 **Prerequisite:** Successful completion of Spanish III

Spanish 4 is for students who have completed three years of high school Spanish. This course reinforces fundamental Spanish skills through a variety of reading, writing, listening, and oral exercises. The course also expands students' knowledge of the civilizations, cultures and customs of Spanish speaking people. Students will be exposed to the works of contemporary writers of the Spanish-speaking world. Spanish will be the language of instruction and students are expected to participate actively.

***UHS Spanish V**

Grade Level: 12 **Credit:** 1 **Prerequisite:** Successful completion of Spanish IV

UHS Spanish V is for those students who have completed four years of high school Spanish. This course develops intermediate Spanish skills through a variety of reading, writing, listening, and oral exercises. Additionally, it further expands students' knowledge of the cultures and customs of the contemporary Spanish-speaking world. Spanish will be the language of instruction and students are expected to participate actively. They will be assigned compositions and videos to be viewed outside of class. There will be an emphasis on readings, short compositions, and class discussions.