

**GENERAL INFORMATION**

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**Planning your schedule:**

*The purpose of the Course Selection Guide is to provide a road map to a successful high school experience that will ultimately prepare students for meaningful post-secondary experiences in college and career readiness. Students are encouraged to choose a meaningful program and to evaluate that program each year with the help of the school counselor and parents/guardians.*

*Cooperation among parents/guardians, students, and staff is important when selecting a program of study that will provide for the educational needs of each student. The WAJ staff will assist you in the decision-making and problem-solving process. Student conferences will also be scheduled for this purpose. If you have any questions, please call the Guidance Office.*

Requirements for Grade-Level Assignment – Promotion And Retention	
<b>Grade 9 Freshman</b>	Promotion from 8 <sup>th</sup> Grade
<b>Grade 10 Sophomore</b>	Students must have earned five (5) units of academic credit including at least one (1) unit of credit in English, and/or one (1) unit of social studies, and one (1) unit of credit in math or science.
<b>Grade 11 Junior</b>	Students must have earned ten (10) units of academic credit including at least three (3) units of English and/or social studies, one (1) unit of math, one (1) unit of science, one (1) unit of L.O.T.E., and in addition, at least one half (.5) unit of physical education.
<b>Grade 12 Senior</b>	Students must have earned fifteen (15) units of academic credit including at least five (5) units of English and/or social studies, two (2) units of math, two (2) units of science, and in addition, at least one (1) unit of physical education and the student must be enrolled in courses that will meet all graduation requirements by June of their senior year.
* Academic credits include all courses other than physical education.	

**Guidelines for Course Planning:**

- Establish personal goals. Even though your plans may change, you should have some general educational, occupational, and personal objectives.
- Honestly evaluate your strengths, interests, aptitudes, and needs.
- Learn the requirements for entrance to the college or program of your choice or to the career area you plan to pursue after graduation.
- During your junior year, visit the colleges or vocational resources of interest to you.
- Speak with your parents/guardians, talk with your teachers, and consult your school counselor in order to benefit from their experiences. Talk and visit with citizens of the community who are currently working in the professions that you find most interesting.
- Select the subjects that will contribute MOST toward helping you achieve your goals.
- If you want to add or delete a course after you receive your schedule, please bring a note from your parents to your counselor.

**Course Requirements**

Required Courses	Regents Diploma	Advanced Regents Diploma **
<b>English</b>	4 credits	4 credits
<b>Social Studies</b>	4 credits	4 credits
<b>Mathematics</b>	3 credits	3 credits
<b>Science</b>	3 credits	3 credits
<b>Language</b>	1 credit	1-3 credits*
<b>Health</b>	½ credit	½ credit
<b>The Arts</b>	1 credit	1 credit
<b>Physical Education</b>	2 credits	2 credits
<b>Electives</b>	3 ½ credits	1 ½ - 3 ½ credits
<b>Total</b>	22 credits	22 credits
<p><b>*To earn the Advanced Designation, the student must compete ONE of the following: 1) three credits in a language other than English; 2) Career and Technical Education (5 credits) plus one credit in a language other than English; 3) Five credits in the arts plus one credit in a language other than English.</b></p>		

**Assessment Requirements**

Required Assessments	Regents Diploma	Advanced Regents Diploma **
<b>English</b>	Required	Required
<b>US History</b>	Required	Required
<b>Global History &amp; Geography</b>	Required	Required
<b>Algebra I</b>	Required	Required
<b>Geometry</b>		Required
<b>Algebra II</b>		Required
<b>Living Environment</b>	Must pass ONE of these science exams – usually Earth Science OR Living Environment	Required
<b>Earth Science</b>	Must pass ONE of these science exams – usually Earth Science OR Living Environment	Required
<b>Chemistry</b>		
<b>Physics</b>		
<p><b>* Advanced Regents Diploma with Honors awarded to those students who complete all the requirements of the Regents Diploma with Advanced Designation and achieve an average of at least 90% on all Regents exams.</b>  <b>*Additional pathways to graduation can be substituted for one of the two required social studies Regents exams. See your counselor for details.</b></p>		

**PLEASE NOTE:**

This guidebook is published annually stating policies and procedures that are updated at the time of publication. All policies and procedures are subject to change based on changes mandated by the New York State Education Department, WAJ Board of Education, or as determined necessary by school administration. All course offerings and programs are subject to change on enrollment, funding, staffing implications and other relevant data used to develop our academic program.

**TITLE IX**

WJ hereby advises students, parents, employees and the general public that it offers employments and educational opportunities, without regard to sex, race, color, national origin or handicap. Grievance procedures are available to interested persons by contacting the office of the Assistant Superintendent for Curriculum and Instruction.

## ADVANCED PLACEMENT

Students interested in enrolling in any one of these AP courses should consult with their teachers and school counselor. Colleges may give credit and/or advanced course placement to those students who take the AP examination and demonstrate mastery of the material presented in the course. Students and parents should contact colleges directly for full information about their AP credit policies. Not every AP course is offered every year, so students should plan accordingly. Further, AP courses are contingent on staff availability and student interest.

Students should refer to the specific courses listed in the Program of Studies for the prerequisite requirements for each course; however, generally speaking, students need an 85% average for courses taken since 9<sup>th</sup> grade in the content area. Teacher recommendation is also needed for ALL AP courses. Five (5) quality points are given for each AP course successfully completed when the weighted GPA average is calculated during the senior year to determine class rank.

WAJ currently offers the following AP courses:

AP US History (every year)

AP World History (every year)

AP Calculus (every year)

AP English Language and Composition (every year)

AP Computer Principles (every year)

AP Statistics (every year)

AP Computer Science (\*odd years only)

AP Music Theory (\*even years only)

AP English Literature and Composition (every year)

AP Art (\*every year contingent on enrollment)

AP Biology (\*even years only)

All WAJ students who take AP courses agree to pay the exam fee. Fee waivers and reductions may be available through your school counselor.

## CRITERIA FOR AP RECOMMENDATIONS

The Student:

- Works well independently, seeks help only when necessary, and does not require detailed or repeated directions from teacher in order to proceed.
- Is creative, can think of methods to try or use original methods when faced with a problem or situation.
- Readily applies learned principles to new situations, can solve novel problems, and responds well to guided discovery.
- Responds positively to challenging situations, shows persistence in searching for solutions, and finds satisfaction in independently solving a problem rather than accepting another person's solution or help.
- Likes to analyze, generalize, derive, prove, and abstract to investigate relationships and alternative solutions.
- Has a strong intuitive sense for the subject matter.
- Sorts out key relationships quickly.
- Shows a high degree of interest and motivation and is intellectually curious and a critical thinker.
- Has experienced high achievement in past courses without undue stress and has not depended heavily on rote learning or tutoring.

- Shows above average ability in oral and written expression.
- Has the ability to demonstrate long-term planning skills.

(Adopted from the College Board Advanced Placement Statistics List serve.)

### ACCELERATION (SINGLE COURSE ADVANCEMENT IN GRADE 8)

Single-course acceleration is available in math and science to *students entering 7<sup>th</sup> grade*. All interested students must complete a Request for Acceleration form and return it to the Guidance Office by the deadline. Later-during 8<sup>th</sup> grade –if students are interested in continuing their studies in a high school, credit-bearing course (usually Earth Science and Algebra I), they do not need to repeat the application process. Multiple indicators are used to determine acceptance for acceleration. These indicators include, but are not limited to, GPA, teacher recommendation, IQ testing, performance on summative assessments (e.g. state tests, local benchmarks, PSAT), developmental, social, and emotional readiness, and parent input/support. Additionally, one quality point will be awarded for successful completion of each accelerated course completed in grade 8. These quality points will become part of the weighted average when rank is calculated during the senior year. For more information on WAJ’s Acceleration Policy, see BOE policy #7431.

### COLLEGE-LEVEL COURSEWORK

WAJ offers many courses for college credit; however, students must meet the prerequisites of the college. Listed below are the courses offered at WAJ. Please note, however, that a few of these courses may not be offered every year as they are rotated on an every-other-year basis. Please consult the list of courses offered in this year’s departmental section of the Program of Studies.

- English 101 (3 credits)
- English 102 (3 credits)
- Spanish 201 (3 credits)
- Spanish 202 (3 credits)
- Biology 101 (4 credits)
- Biology 102 (4 credits)
- General Chemistry 101 (4 credits)
- General Chemistry 102 (4 credits)
- Health 103 (3 credits)
- Statistics (3 credits)
- Computer Applications (3 credits)
- United States History 1492-1865 (3 credits)
- United States History 1865-Present (3 credits)
- Macroeconomics (3 credits)
- American Government (3 credits)
- Pre-calculus (4 credits)
- College Algebra (4 credits)
- Calculus I (4 credits)
- Forensics (4 credits) / odd years
- Geology (4 credits) / even years
- Contemporary Global Issues (3 credits) / odd years
- American Civil War (3 credits) / even years

Students should consult the departmental section of the *Program of Studies*; for each college’s prerequisite requirements. Additionally, four quality points will be added to the GPA for each successfully completed college course when the weighted average is calculated for class rank during the senior year.

## UPPER-LEVEL STUDY IN MATH AND SCIENCE

Students are encouraged to continue their course of study during their senior year by enrolling in a 4<sup>th</sup> year of math and/ or science. Such courses include-but are not limited to—Physics, AP Biology, Pre-Calculus, AP Calculus, College Algebra, Statistics, AP Statistics, Forensics, Geology, AP Computer Science, AP Computer Principles, and AP Biology. Two additional quality points will be awarded for a 4<sup>th</sup> year of math and/or science. If the 4<sup>th</sup> year is a college course, 4 additional quality points will be awarded, and if the 4<sup>th</sup> year is an AP course, 5 additional quality points will be awarded.

## DISTANCE LEARNING ELECTIVES

WAJ offers a variety of electives that provide students additional rigor in their schedules. These courses are offered through our ONC BOCES consortium or through extended opportunities from schools all over New York State. Students who take these electives will be instructed by New York State certified instructors via online technology in the DL classroom. Distance Learning courses allow students to:

- Expand horizons with a much greater selection of course offerings.
- Take additional courses for college credit.
- Experience cutting-edge technology in a hands-on environment.
- Interact with students and teachers from other schools and communities in a setting that helps prepare the student for advanced educational and real-world situations.
- Meet new students with common concerns and different perspectives.

## DOUBLING FOR MANDATED COURSES REQUIRED FOR GRADUATION (CREDIT RECOVERY)

Mandated courses are required for graduation. If a student does not pass a required course, he or she can request to repeat the failed course in tandem with the next course in the sequence, popularly known as “doubling”. The Assistant Superintendent of Curriculum and Instruction finalizes all decisions regarding a student’s doubling privileges. WAJ does not guarantee the accommodation of student requests. If afforded the privilege of doubling, a parent or guardian must provide signed approval. Daily attendance is a factor in determining and maintaining eligibility for doubling. At the end of the semester, a student is granted course credit if he or she earns a cumulative average of 65% or higher in the repeated course, including averaging in a final exam if applicable. Students enrolled in a course requiring a Regents exam must remain in the course until they successfully pass the Regents exam. Students who previously earned a passing regents exam score (even though they failed the course) can earn course credits by repeating the course for one semester and passing it with a 65%. If the student is doubling in a half-year course, the student must pass the first quarter and the final exam (if applicable) with at least a 65%.

## NEW VISIONS

*New Visions* is a one-year, honors-level program that turns area businesses and government buildings into classrooms for highly motivated, academically successful high school seniors. New Visions programs are offered in Engineering, Health Careers, Journalism and Media Studies and Law & Government. Classes meet from 8-11:30 a.m. (The Engineering program at ONC BOCES is a full-day program). The Health Careers classroom is located at Ellis Hospital in Schenectady or St. Peter’s Hospital in Albany. Journalism & Media Studies students meet for class at the Times Union in Colonie, and the Law & Government classroom is located at the State Education Building, directly across from the Capitol in Albany. Students learn through traditional methods (lecture, reading, research, writing and focused study), group discussion, and internships and rotations.

## COLLEGE AND ENTRANCE REQUIREMENTS

Colleges prefer a strong academic preparation in high school. Specific subjects and grade average requirements vary from one institution to another, as the institutions themselves vary in the programs they

offer and the kinds of students they seek. Colleges prefer students who have had a high school program that includes four years of English and Social Studies, three to four years of Mathematics, three to four years of Science, and one to five years of Foreign Language. College-bound students who choose to “drop” one of these areas before they graduate should do so only after careful consultation with teachers, counselors, and parents.

Taking a full academic program and obtaining a high level of achievement, together with activities that show the student is willing to participate in and contribute to the school or community, are the best ways to assure that a student will meet the requirements for college entrance. Students should check college bulletins and consult their counselor for specific information as they make their choices.

### CAREER TECH PROGRAMS

WJ is able to offer its students a variety of vocational options through ONC BOCES. To be eligible to attend a Career Tech Program, a student must meet the following requirements:

1. As an enrolled student in grades 9-11, students must complete their basic graduation requirements in their freshman and sophomore years before attending Career Tech, unless the student is serviced through the Committee on Special Education.
2. Students must show interest in the area chosen.
3. Students must realize that they cannot drop from a chosen Career Tech program until June of that school year.
4. Based upon current grades and attendance, students must demonstrate that they have the potential to complete the program chosen.
5. Students must notify their counselor of intent prior to March 1<sup>st</sup>.
6. Students not accepted into their chosen program will meet with the counselor in June to select courses offered at WJ.

Course descriptions are available in the guidance office and are distributed to all sophomores during the Career Tech Orientation Program. The following courses are based upon availability.

#### *Career Tech Programs for Juniors & Seniors*

- Automotive Technology
- Culinary Arts
- Welding
- Cosmetology
- Visual Communications and Technology
- Equipment Operation and Repair
- Building Trades
- New Visions Programs, (based upon BOCES’s ability to provide them), are available to incoming seniors who have a minimum of 85% GPA. Seniors may earn high school credit for English 12, Economics, and Participation in Government through this program. Please see your counselor for further details. Enrollment in ALL Career Tech Programs is contingent upon district approval of the applicant.

### COURSE LOAD REQUIREMENTS

Students in grades 9-11 must carry a minimum of 6 credits PLUS Physical Education each semester. **Seniors** must carry a minimum of 5 credits PLUS Physical Education each semester.

### COURSE SELECTION PROCESS

**STEP ONE:** Planning for course selection is an ongoing process. Every 9<sup>th</sup> grader will create a tentative 4 year plan which will be evaluated—as needed—with the school counselor.

**STEP TWO:** The *Program of Studies* will be available to every student in grades 8-11 prior to course registration. Parents are asked to review the course description and policies with their child as they help them make appropriate selections.

**STEP THREE:** Each student in grades 8-11 will then meet with the counselor to make the final course selections in SchoolTool. A transcript check will be part of this meeting which will confirm that the student is on track for meeting graduation requirements. The student will also be responsible for sharing with parents the course selections that were made in SchoolTool.

**STEP FOUR:** Parents are required to sign a parent approval form after reviewing the Course Selection Form.

### PROCEDURES FOR SCHEDULE CHANGES

For any schedule change, a *Drop/Add Course Request Sheet* must be obtained from the Guidance Office. A meeting must also be scheduled with the school counselor to discuss the change. Students will not be able to make any level changes after the school year begins. In some of our subject areas, levels of instruction have been established to appropriately challenge the academic ability of students. Decisions regarding the level placement of a student in a course are based on the student's past performance in the subject area, teacher recommendation, and the student's standardized testing record (when applicable). For some courses, the subject teacher(s) makes a recommendation for the course or level of instruction for the next school year. If parents or students want to challenge a course higher than that which was recommended by the teacher, this request needs to be made in writing to the Assistant Superintendent before the school year begins.

### DROPPING COURSES

Students will be allowed to drop a semester or a full-year course in which they are enrolled, without penalty, prior to the end of the first marking period. Students wishing to drop a course must initiate a conference with their guidance counselor to secure a *Change of Schedule* form. This form must be returned to the Guidance Office signed by the appropriate teachers and a parent, when requested. When dropping a course, students must continue to attend the class until all signatures are obtained, the form is returned to the Guidance Office and the counselor has notified the student that the change has been made. Missing class before the drop procedure is completed will be regarded as an unexcused absence.

### ADDING COURSES

Students will be permitted to add a full-year course within the first 10 school days (two weeks) of the course. Students are responsible to make up all missed work. A second semester ( $\frac{1}{2}$  year course) may be added prior to the first day of the new semester.

Students wishing to add any new course after the time period outlined above must additionally submit to the Guidance Office a written contract between the student and the teacher outlining all requirements necessary to complete the missed work. Permission of the instructor is required before the course will be added.

When adding a course, a student must continue to attend all previously scheduled classes and study halls until all change forms are completed and the student's schedule is changed.

Nonessential Programmatic Changes will not be made unless extenuating circumstances exist. Examples of such changes include (but are not limited to):

- Change of lunch period
- Change of teacher
- Change of course period



## GRADUATION IN LESS THAN FOUR YEARS

WAJ students may graduate in less than four years. The decision to do so should be made by parents and students based on the student's goals so that the time gained by this decision will be put to good use in work, travel, or continued study at some other institution.

After a parent and student have discussed the proposal thoroughly, they should consult the student's counselor for a careful consideration of how such a decision could affect the student's future plans. Some considerations might include the student's age and maturity, the approval of the parent, the student's reason for desiring early post-secondary education, and whether or not the school would have anything to offer the student during the fourth year that would benefit the student's goals and career choice.

## NCAA ELIGIBILITY DISCLOSURE

The National Collegiate Athletic Association has its own process for determining which courses they will accept for student eligibility. The NCAA is an independent organization with no affiliation to the New York State Education Department or any other formal entity as it relates to academics at the secondary level. Each high school in the country must submit courses to the NCAA for approval on a yearly basis. Therefore, if you are a prospective student athlete for competition at the Division I, I-AA, or II levels, you must go through the NCAA clearinghouse process. We strongly urge students who are candidates for collegiate athletics to meet with their school counselors on a regular basis to review the transcript and verify which courses will be accepted by the NCAA. For more information on the NCAA process, students and parents may visit their website at [eligibilitycenter.org](http://eligibilitycenter.org)

## ADVANCING THROUGH SEQUENTIAL COURSES

There are specific requirements or prerequisites for advancing through sequential courses in most content areas. Please read those departmental sections carefully. When in doubt about electing the next sequential course, consultation with the teacher and school counselor is recommended. Also, there are some allowable substitutions (e.g. college-level coursework) for some Regents-level courses. (E.g. substituting Accounting for a required math credit). Students should make these requests to the counselor when making their schedule.

Students may not request substitutions for any course that includes a state-mandated Regents exam (e.g. US History) unless the substituted course is equally able to satisfy the graduation requirement (e.g. substituting Living Environment for Earth Science in order to meet the Regents exam requirement for a Regents Diploma).

## LEVELS OF COURSES

WAJ has five levels of courses: Regents, Accelerated, Upper-Level Academic, College-Level, and Advanced Level.

**Regents-Level** courses are all courses not designated as AP or college-level for students receiving a Regents or Local diploma. This includes all courses needed for graduation and all electives.

**Accelerated** courses are those that meet the requirements of the district's Acceleration Policy. Currently, WAJ only offers acceleration to grade 8 students in math and science (for 9-12 courses).

**Upper-Level** courses are 4<sup>th</sup> year courses that are NOT required for graduation. Generally, these courses are taken in the senior year; however, some students (because of acceleration or doubling) could take them in years other than the senior year. Such courses include-but are not limited to-Physics and Calculus.

**College-Level** courses are any college courses taken with institutions that have agreements with WAJ. Currently, these institutions are SUNY Albany, SUNY Delhi, SUNY Cobleskill, TC3, Syracuse University, Columbia Greene Community College, Rochester Institute of Technology and Hudson Valley Community College. WAJ's agreements with these institutions are for specific courses identified in the Program of Studies only-or courses that get added via Distance Learning agreements with ONC BOCES. Parents and

students will be notified if additions are made prior to the school year so that all students have equal access to those opportunities.

*Advanced Level* courses are Advanced Placement courses.

### WEIGHTED CLASS RANK & GPA

Class rank will be determined by weighted averages. Adding all of the weighted grades and dividing by the total number of credits will determine the final average. (Earned grade + quality point = weighted grade) The calculation of the weight is as follows: Regents courses = 0 quality points; Accelerated courses = 1 quality point; Upper-Level = 2 quality points; College Level = 4 quality points; and Advanced Level (AP) = 5 quality points. For more information, please see your counselor and/or consult BOE policy #7430

### HOW 4-YEAR COLLEGES VIEW YOUR HIGH SCHOOL PROGRAM

Four-year colleges look for students who have taken the most challenging program available to them and in which they can demonstrate success. Most colleges indicate that the single most important part of a student's application is the high school transcript.

The transcript includes:

- The course titles and levels (e.g. AP, Regents, College-Level).
- The final averages earned in each course completed.
- Final exam and Regents exam scores.
- The 4-year cumulative grade-point average.
- Weighted and unweighted GPA.

### SUPPORT SERVICES

If you find that you are having difficulty in school with academics or issues outside of school, there are people in the high school who can help you.

#### *School Counselor*

Your counselor is your academic advisor, helping you to choose appropriate courses which will prepare you for college, the military or full-time employment after high school. If you are having personal or social concerns, your counselor can also provide you with assistance.

#### *School Social Worker*

WJ provides crisis counseling and referrals to Greene County Mental Health for students experiencing personal or family problems. Also, they provide networking and assistance when students are placed or referred to other outside agencies.

#### *School Psychologist*

This professional performs psycho-educational evaluations to determine eligibility for special support services for students who are encountering academic and/or emotional difficulties in school.

#### *Director of Student Services*

This administrator acts as your advocate, ensuring that you have the supports in place to succeed.

#### *Classroom Teacher*

Your classroom teacher is available during the school day to provide extra help. Before and/or after school help may be available as well. See your teachers to make arrangements.

*Assistant Superintendent of Curriculum and Instruction*

This administrator is available to assist you with questions you may have regarding curriculum and specific course offerings.

*Homework and Technology Resources*

Students can get academic assistance from teachers or student tutors after the regular school day. Students who take advantage of this time can take a late bus home.

WAJ has a commitment to provide a comprehensive education program and the support required to enable all students to meet the New York State learning standards and be successful.

In keeping with this commitment, the District provides a variety of integrated services, technology platforms, and personnel to help all students in their academic success.

Parents can also track their child's progress in every class using the technology platform, SchoolTool; Contact the guidance office for a login and password to be able to view your student's classes and grades.

WAJ prioritizes the core classes, as they are required for graduation and prepares our students for commencement level exams; thus, we meet at grade levels every five weeks to monitor every student's progress toward success on these assessments.

**ACADEMIC INTERVENTION SERVICES**

"Academic intervention services are intended to assist students who are at risk of not achieving the State learning standards in English language arts, mathematics, social studies, and science, or at risk of not gaining the knowledge and skills needed to meet or exceed designated performance levels on State assessments". (Commissioner's Regulations, adopted by the Board of Regents in July 1999; Section 100.1(g)). AIS is offered at WAJ in a variety of ways: during the school day as a pull-out service, during activity period after school, as additional instruction during the school day, and before school-or any combination thereof.

At WAJ, students are placed within these services based on the following criteria:

- Students who have not passed state-mandated assessments in subjects listed above.
- Students who either have not met requirements of state-mandated assessments, but have passed the course, or who score at level 1 or 2 on the grade 8 ELA assessment.

Students who have a disability that may be eligible for an individualized plan that provides accommodations and/or services to assist the student in meeting New York State learning standards.

*Section 504 Accommodation Plan*

Students who have a disability that affects the student's ability to be successful in the general education setting without accommodations may need a Section 504 Plan. With a 504 Plan, students are provided classroom accommodations such as preferential seating, being allowed to leave class to go to the health office, or use the elevator. Students may also receive testing accommodations such as a scribe or separate location. Students receive minimal services with a 504 plan, such as access to resource room or social work counseling.

*Individualized Education Plan under IDEA*

Students who have a disability that adversely affects their learning may need and Individualized Education Plan (IEP). The IEP describes the student's educational strengths and needs related to the disability. It also outlines the special education and related services goals, services, classroom accommodations, technology needs, and testing accommodations that the student requires. WAJ offers a full continuum of special education services and supports for students with disabilities.

*Related Services*

Students may receive related services (speech therapy, adapted physical education, and/or counseling) 1-5 times per week. Related services may be provided within the general education classroom, in a special education classroom, or in a therapy room. Services will be individual or group.

*Life Skills Instructional Program*

This program is for students with an IEP who are pursuing an IEP diploma and who need a like skills-based curriculum. During the freshman and sophomore years, the students are enrolled in Life Skills classes in English, Math, Science, and/or Social Studies. Students also take Physical Education and electives. During the junior and senior years, the students are enrolled in Life Skills classes in English and Math and Physical Education for half a day. For the remainder of the day, the students participate in a career and technical work program through either WAJ or ONC BOCES.

*Functional Skills Instruction Program*

This program is for students with an IEP who are pursuing an IEP diploma and are eligible for the New York State Alternate Assessment. Students participate in functional skills instruction through the Functional Skills Instruction classroom and through community-based instruction and work experiences. Students in this program generally remain eligible for the program until age 21. As the student progress through high school and their post-graduate years, the focus is on transitioning to post high school experiences. Additionally, their time spent in the community-based work program increases and their classroom-based instruction decreases.

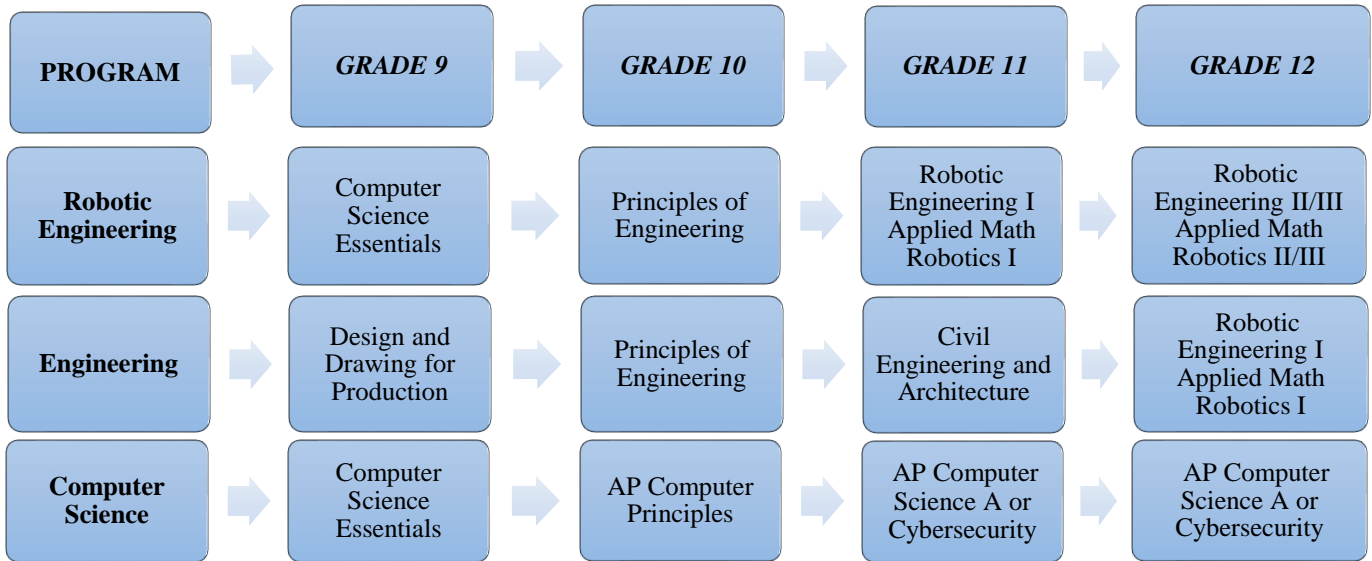
*Co-Taught Academic Support Program*

This program is for students with an IEP who are pursuing a high school diploma and who need significant support and modifications in the general education program due to reading and math skills that are well-below grade level. The general education teacher and the special education work together during classroom instruction to maximize the success of all students in the class.

GPA NUMERICAL EQUIVALENT

GPA	Numerical Equivalent	GPA	Numerical Equivalent	Letter Grade	Numerical Grade
4.0	100-97	2.4	79	A+	100
3.9	96-95	2.3	78	A	96
3.8	94-93	2.2	77	A-	92
3.7	92	2.1	76	B+	89
3.6	91	2.0	75	B	86
3.5	90	1.9	74	B-	82
3.4	89	1.8	73	C+	79
3.3	88	1.7	72	C	76
3.2	87	1.6	71	C-	72
3.1	86	1.5	70	D+	69
3.0	85	1.4	69	D	67
2.9	84	1.3	68	D-	65
2.8	83	1.2	67	F	60
2.7	82	1.1	66		
2.6	81	1.0	65		
2.5	80				

*Typical Computer Science and Engineering Progressions*



**Note:**

Students are strongly encouraged to meet with both high school counselor **AND** the programmatic teacher(s) for advisement **EARLY** in the progression process. This is highly recommended **BEFORE** entering grade 9.

[AP Computer Science A](#)

Credit: 1

Weighting: 5

**Course Description**

A student taking this course should be comfortable with functions and function notation. It is important that students understand that this course builds upon a foundation of mathematical reasoning that should be acquired before attempting this course.

This course emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development and is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction. This course covers the following topics: Object-Oriented Program Design, Program Implementation, Program Analysis, Standard Data Structures, Standard Algorithms, and Computing in Context.

**Course Requirements**

Prerequisite: knowledge of Basic English and Algebra.

[AP Computer Principles](#)

Credit: 1

Weighting: 5

**Course Description**

Computer Principles (CP) is a PLTW course to implement the College Board’s new AP CS Principles framework. Students work in teams to develop computational thinking and solve problems. The course

does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. The course also aims to build students' awareness of the tremendous demand for computer specialists and for professionals in all fields who have computational skills. Each unit focuses on one or more computationally intensive career paths. The course also aims to engage students to consider issues raised by the present and future societal impact of computing.

**Course Requirements**

None

**Applied Math Robotics I**

Credit: .5

Weighting: 0

**Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

**Course Requirements**

Prerequisite: Student must be enrolled in Robotics Engineering I (.5 credit) at the same time as this course; instructor approval needed. One-half semester credit will be given for *each* course: Applied Mathematics Robotics I and Robotic Engineering I. (Limit 10 students)

**Applied Math Robotics II**

Credit: .5

Weighting: 0

**Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

**Course Requirements**

Successful completion of Applied Math Robotics I **and** Robotic Engineering I is a prerequisite for this second-level course. Instructor approval is also required.

**Applied Math Robotics III**

Credit: .5

Weighting: 0

**Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and

functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

**Course Requirements**

Successful completion of Applied Math Robotics II and/or Robotic Engineering II is a prerequisite for this third-level course. Instructor approval is also required.

**Civil Engineering and Architecture**

*Credit: 1 (3 college credits)*

*Weighting: 4*

**Course Description**

Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

The major focus of the CEA course is to expose students to the design and construction of residential and commercial building projects, design teams and teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based (APPB) teaching and learning pedagogy, students will analyze, design and build electronic and physical models of residential and commercial facilities. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process.

**Course Requirements**

Algebra I

(Limited seating due to safety constraints for tools and machines.)

**Computer Science Essentials**

*Credit: 1*

*Weighting: 0*

**Course Description**

Computer Science Essentials (CSE) is designed as an excellent entry point for new high school computer science (CS) learners; it is the first in a 4-year sequence of classes. Students who have prior CS experience will find many opportunities to expand upon those experiences in this course. There will be many opportunities for creative expression and exploration in topics of personal interest, whether it be through app development, web design, or connecting computing with the physical world. CS Essentials introduces students to coding fundamentals through an approachable, block-based programming language where they will have early success in creating unusable apps. As students sharpen their computational thinking skills, they will transition to programming environments that reinforce coding fundamentals by displaying block programming and text based programming side-by-side creating programs that will send self-driving vehicles through obstacle courses. Finally, students will learn the power of text-based programming as they are introduced to the Python® programming language. This course will help students gain confidence and reinforce essential concepts and skills that build toward life-long success in the computer science pathways beyond just PLTW courses.

**Course Requirements**

*None*

**Cyber Security***Credit: 1**Weighting: 0***Course Description**

As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyber-attacks. This course prepares students with crucial skills to be responsible citizens in a digital future.

The introduction to Cybersecurity is the first online blended K12 cybersecurity course. The Vigenère year-long version is designed for students with some exposure to computer science, but there are no specific course prerequisites. Students will learn foundational cybersecurity topics including digital citizenship and cyber hygiene, the basics of cryptography, software security, networking fundamentals, and basic system administration and all through the CodeHS web-based platform. Students will complete projects at the end of each module, and a culminating course project where they will complete a simulated hack walkthrough. This is not a coding intensive course, but students will learn basic SQL, and will utilize basic HTML and JavaScript within specific contexts and will be provided supports within those contexts.

**Course Requirements***None***Design and Drawing for Production***Credit: 1**Weighting: 0***Course Description**

Design and Drawing for Production is a high school level course that is appropriate for 9<sup>th</sup> and 10<sup>th</sup> grade students who are interested in designing, engineering or a technical career. The major focus of the course is to expose students to a design process, professional communication and collaboration methods, design ethics, and technical documentation. Used in combination with a teaming approach, DDP challenges students to continually hone their interpersonal skills and creative abilities while applying math, science, and technology knowledge learned in other courses to solve engineering design problems and communicate their solutions.

In addition, students will use industry standard 3D solid modeling software to facilitate the design and documentation of their solutions to design problems and challenges. As the course progresses and the complexity of the design problems increase students will learn more advanced computer modeling skills as they become more independent in their learning, more professional in their collaboration and communication, and more experienced in problem solving. Some of the activities they may engage in will utilize mechanisms, motors and the use of the wood shop to build working models.

**Course Requirements***None***Principles of Engineering***Credit: 1**Weighting: 4***Course Description**

Principles of Engineering (POE) is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem solving skills based upon engineering concepts.



**Course Requirements**

Design and Drawing for Production (for Engineering Sequence)  
 Computer Science Essentials (for Robotic Engineering Sequence)  
 Algebra

**Robotic Engineering I**

*Credit: .5*  
*Weighting: 0*

**Course Description**

A first course in robotics starts from the ground floor when exploring the applications and methods of robotic engineering technology. The course discusses motors, microprocessors, mechanics, artificial intelligence and sensors. It teaches the theory of electrical, pneumatic and hydraulic control systems as well as real-time programming and the concepts of work envelope. The class also discusses the various use of robotics in different fields, such as aerospace, medical, automotive and manufacturing industries. This course is taught in conjunction with Applied Math Robotics where Coding is the emphasis.

**Course Requirements**

Prerequisite: To be taken in conjunction with Applied Math Robotics I.

**Robotic Engineering II**

*Credit: .5*  
*Weighting: 0*

**Course Description**

Multidisciplinary teams of students design, build, and demonstrate a robotic system, including all sensing, computation, and actuation. The specific VEX state robotic competition tracks, such as stacking, shooting, climbing etc., changes each year, and is designed to be challenging for ambitious students. Robots will compete in NY State Vex competitions, periodically 2 to 3 times during the term. This course is taught in conjunction with Applied Math Robotics 2 where Coding for competitions is the emphasis.

**Course Requirements**

Prerequisite: To be taken in conjunction with Applied Math Robotics II.

**Robotic Engineering III**

*Credit: .5*  
*Weighting: 0*

**Course Description**

This 3<sup>rd</sup> year course will involve students in the development, building and fabrication of robotics chassis'. Students will work hands on in teams to design, build, program, and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, decision making, propulsion systems and locomotive systems. The objective of this course is to use a hands on approach to introduce the basic concepts in robotics, focusing on The VEX state robotics competition and tournaments. Students who successfully complete this course will have learned:

- Fundamentals of programming concepts
- Scientific method and inquiry
- Basic physics and physical science concepts
- Programming concepts related to robotics
- Fundamentals of engineering concepts related to robotics
- Focus on teamwork and collaboration
- Robotics competitions and the robotics industry
- Introduction to 3D modeling of robotics

**Course Requirements**

Prerequisite: To be taken in conjunction with Applied Math Robotics III.

## *English Language Arts Requirements*

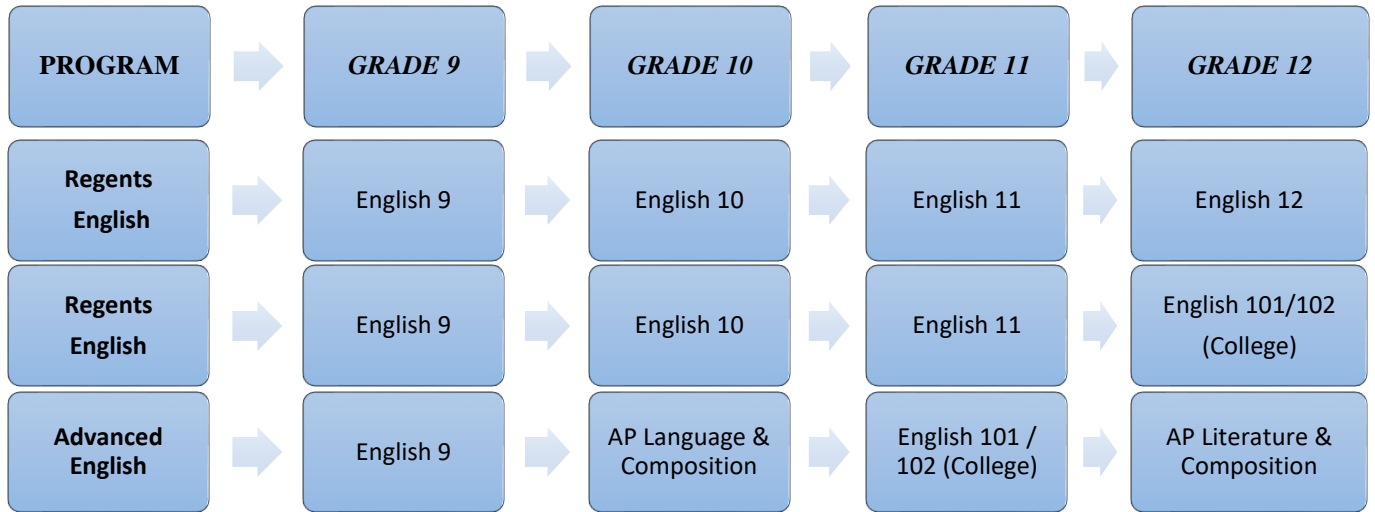
### *Regents and Advanced Regents Diplomas*

In order to obtain a Regents Diploma or and Advanced Regents Diploma, a student must earn 4 units of English credit, plus earn a grade of 65% on the English Language Arts Regents Examination.

### *Typical English Progressions*

**Note:**

*These are typical progressions in English used at WAJ; however students may customize progressions to their desired Program of Study-pending administrative approval.*



### AP Language and Composition

*Credit: 1*

*Weighting: 5*

#### **Course Description**

AP Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style. Students in the AP Language and Composition course will hone skills in reading, writing, listening, viewing, and discussing. Students will read a variety of rigorous texts (mostly nonfiction) as set forth in the AP Language and Composition Course Exam and Description (CED) framework. This course requires timed in-class essays scored on the AP rubric, a summer assignment, and work outside of class.

#### **Course Requirements**

Prerequisite: 85% GPA in English and teacher recommendation

### AP Literature and Composition

*Credit: 1*

*Weighting: 5*

#### **Course Description**

Students in this rigorous college-level English course will study literature found within the American and British literary canon. Various literary genres from different time periods will be included, as well as selections from non-Eurocentric texts to give students a more broad understanding of world literature.

These students will become conversant in literary theory and criticism, and will explore rhetorical and literary techniques writers employ. Through reading, discussion, and writing tasks, students will develop critical literary analysis skills and college level writing skills. At the end of the spring semester, students will have the opportunity to earn college credit by taking the Advanced Placement Examination in Literature and Composition.

**Course Requirements**

Prerequisite: 85% GPA in English and teacher recommendation

**College English 101 (EN 101)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

English 101 is an introductory college course emphasizing the process and patterns of writing college-level expository prose. This course includes reading assignments, extensive practice in writing clear, well-developed, grammatically correct essays, a research paper, and an oral presentation.

**Course Requirements**

Prerequisite: 80% cumulative GPA in prior English coursework in grades 9-12

**College English 102 (EN 102)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

English 102 includes a range of texts from short stories and poetry to plays and/or novels. Writing includes both formal and informal criticism and analysis of the texts. This course is general survey of literature. We will discuss short stories, poems, and plays. Your level of participation will determine how much you garner from this course. The goal is to create an intimate community of readers who will discuss the readings and how they are relevant to our lives. Extensive practice in writing and a great deal of reading are expected.

**Course Requirements**

Prerequisite: English 101 (EN 101) 80% cumulative GPA in prior English coursework in grades 9-12

**English 9**

*Credit: 1*

*Weighting: 0*

**Course Description**

English 9 is a required course that exposes students to a range of literary genres and writing forms. Literary selections range from Short Fiction to Shakespeare, and include a variety of classic and contemporary titles. Students will continue to develop their writing abilities and will be introduced to the required tasks on the ELA Regents exam, such as analytical essays. Members of English 9 will also be challenged to participate in cogent discussions about various works of literature. Students will be required to read one independent novel per quarter, in addition to the texts that are studied as a class.

**Course Requirements**

*None*

**English 10**

*Credit: 1*

*Weighting: 0*

**Course Description**

Tenth grade English emphasizes the influence and importance of American and English Literary classics

that cover a variety of subjects and periods in order to develop an appreciation of classical themes and styles while developing skills in reading, writing, listening, and speaking. Students will develop their writing skills through creative writing assignments, narrative writing, and expository essays. Students will also be introduced to, and receive extensive practice in, the ELA Regents Examination taken in the eleventh grade, which is a New York State graduation requirement.

The class will apply the Next Generation Learning Standards to daily lessons, offering a wide variety of rigorous, grade-level texts, writing tasks, and speaking projects designed to increase vocabulary, reading comprehension, research ability, and writing sophistication. While there is no Regents exam for grade 10, our activities will help prepare students for the grade 11 English Regents exam.

**Course Requirements**

Prerequisite: English 9

**English 11**

*Credit: 1*

*Weighting: 0*

**Course Description**

Students will examine social, political, and cultural event in American history and their efforts on the discipline of literature. Lively discussions, debates, and writing activities will be the primary means of student to student and student to teacher communication. In addition, students will learn strategies and skills to prepare them for the SAT verbal section, as well as the ELA Regents examination. Reading, writing, speaking, and listening are experienced as interactive and interrelated processes. The study of literature gives students an opportunity to read, interpret, and respond to literature personally and critically.

**Course Requirements**

Prerequisite: English 10

**English 12**

*Credit: 1*

*Weighting: 0*

**Course Description**

English 12 is a required course that will continue to build upon students' reading, writing, analytical, and critical thinking skills, culminating in at least two major projects. The goal of this course is to not only read esteemed works of literature, but also to develop students' ability to read literature analytically based on the themes, styles, aesthetics, and criticisms of those works. Students will be introduced to literary criticism, and will write for a variety of purposes. Related to these modes of criticism, members of the class will complete several critical responses to the works we read, as well as a research paper that will account for a significant portion of the third quarter grade, and that will follow MLA format. This course will prepare students for the demands of college-level writing and literary discourse, as well as offer practice in practical writing tasks that will be necessary for success in real-world situations.

**Course Requirements**

Prerequisite: English 11

**Creative Writing**

*Credit: .5*

*Weighting: 0*

**Course Description**

An introduction to creative writing is the focus of this course. Lively discussions, projects, and writing activities will be the primary means of student to student and student to teacher communication. Students will learn the basics of creative writing through the analysis of reading selections, writing styles, and student models.

**Course Requirements**

Prerequisite: Teacher Recommendation

## *Physical Education and Health Requirements*

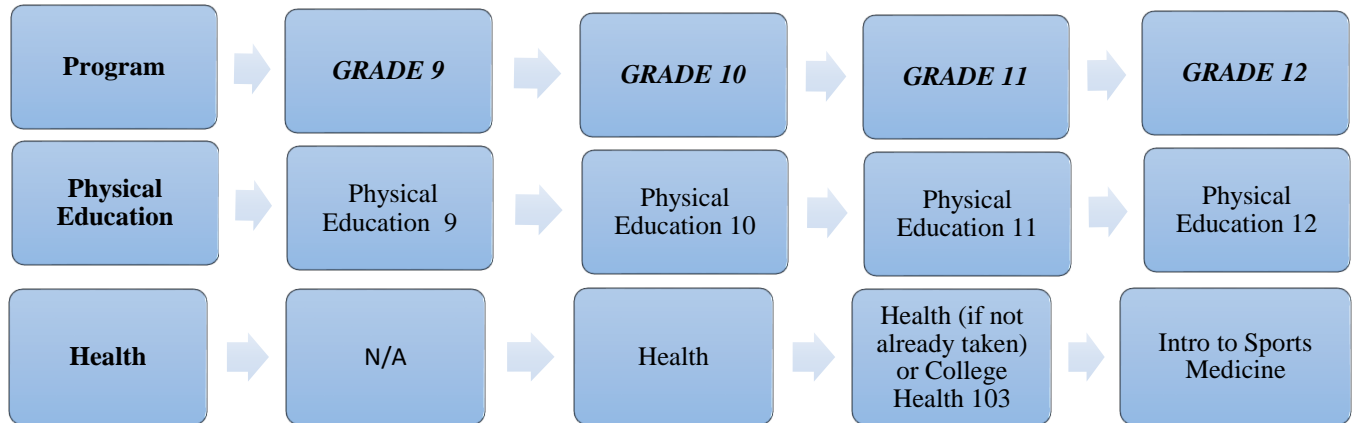
### *Regents and Advanced Regents Diplomas*

In order to obtain a Regents Diploma or and Advanced Regents Diploma, a student must earn 2 credits of Physical Education (½ each year) and a half credit of Health Education.

### *Typical Health and Physical Education Progressions*

**Note:**

*These are no optional progression in physical education. All students must take PE each year. Health can be taken any year in grades 10-12*



**Health**

*Credit: .5  
Weighting: 0*

**Course Description**

This intermediate health course is designed for students to take a closer look at their personal health behaviors (physical, social, and mental) and the impact it will have on their overall wellness. Through various lessons, interactive activities and learning experiences, students will gain the knowledge and experience to live a long and healthy life. Topics of study include but are not limited to: mental/emotional health, nutrition, drugs of abuse, social health, and diseases.

**Course Requirements**

*None*

**Physical Education**

*Credit: .5  
Weighting: 0*

**Course Description**

This course is designed for students to take a closer look at their personal fitness and health. Through various learning experience and activities, students will acquire the skills and knowledge to participate in physical activity and sport throughout their life. New York State Physical Education learning standards will be the framework for all units and lessons.

**Course Requirements**

For safety reasons, students are expected to dress with appropriate footwear.

**Health 103**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

An introductory course dealing with the current critical issues involved in promoting and maintaining a wellness lifestyle. Emphasis is placed on viewing health in a multi-dimensional manner and assuming responsibility for maintaining one's health. Major issues to be addressed include stress, cardiovascular diseases, cancer, drugs, nutrition, environmental health, and physical conditioning.

**Course Requirements**

Prerequisite: 85% GPA and teacher recommendation

**Introduction to Sports Medicine**

*Credit: .5*

*Weighting: 0*

**Course Description**

In this introductory course students will discuss and learn the basics about sports injuries and recovery. Topics will include: basic injury care and prevention, the biomechanics of common sports injuries, as well as how to create and implement a physical therapy program to heal from various sports injuries. Additionally students will be trained in American Red Cross CPR, AED and First Aid.

**Course Requirements**

None

## *Humanities Requirements (Art and Music)*

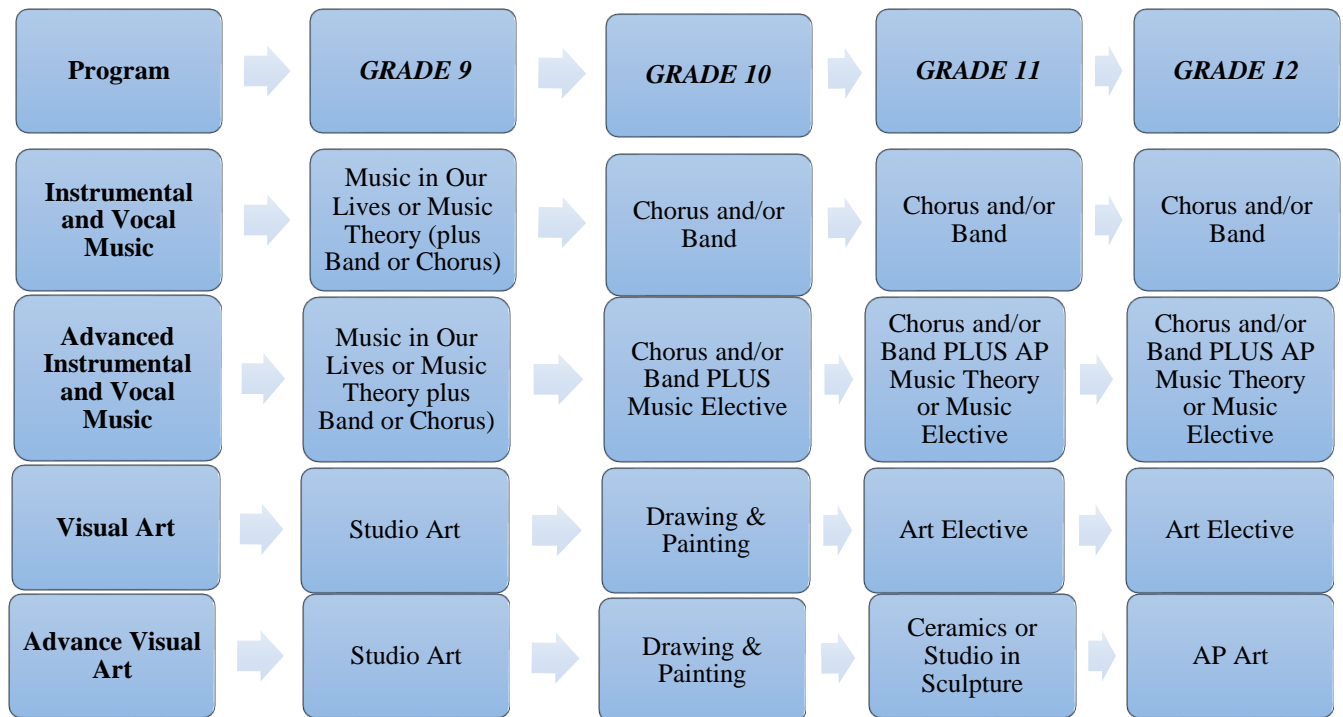
### *Regents Diploma*

In order to obtain a **Regents Diploma**, a student must earn one foundational art credit and one language credit. Students can choose from four foundation courses: Music Theory, Music in Our Lives, Studio Art, or Design, Drawing and Production.

### *Typical Humanities Progressions in Art and Music*

**Note:**

*These are typical progressions in art and music used at WAJ; however, students may customize progressions to their desired Program of Study-pending administrative approval.*



### Studio in Art

*Credit: 1  
Weighting: 0*

#### **Course Description**

This is an introductory foundation course that provides a multiplicity of visual experiences in drawing, painting, printmaking, and sculpture. Studio in Art is a prerequisite to all other high school art courses. The goals of this course are:

1. to encourage a personal approach and interpretation, as well as develop related skills and techniques;
2. to assist the student in forming value judgements of diverse form and scope, of their own work and the work of others;
3. to provide opportunities to explore and use a wide variety of materials and tools.

#### **Course Requirements**

*None*

**Ceramics I and II**

*Credit: .5 per semester*

*Weighting: 0*

**Course Description**

This course provides a multiplicity of experiences in working with clay. It includes the use of the potters wheel, the creation of ceramic sculpture, and the use of ceramic glazes.

The goals of this course are:

1. to encourage a personal approach and interpretation, as well as develop related skills and techniques;
2. to assist the student in forming value judgements of diverse form and scope, of their own work and the work of others;
3. to provide opportunities to explore and use a wide variety of ceramics methods and tools.

**Course Requirements**

*None*

**Drawing and Painting I and II**

*Credit: .5 per semester*

*Weighting: 0*

**Course Description**

This is an advanced course for grades 10, 11, or 12 which may be elected after a student has completed *Studio in Art*. This course provides a multiplicity of visual experiences in drawing and painting that are broad in scope and that will challenge the student's ability.

The goals of this course are:

1. to encourage a personal approach and interpretation, as well as develop related skills and techniques;
2. to assist the student in forming value judgements of diverse form and scope, of their own work and the work of others;
3. to provide opportunities to explore the use a wide variety of ceramics methods and tools.

**Course Requirements**

*None*

**Studio in Sculpture**

*Credit: 1*

*Weighting: 0*

**Course Description**

This course provides an introduction to sculpture, emphasizing the understanding and manipulation of three-dimensional space using form and scale. Students explore various processes, materials, techniques, and tools. Competence in basic drawing is essential. Includes a historical overview.

The goals of this course are:

1. to develop an understanding of basic design principles with an emphasis on three-dimensional design;
2. to develop an understanding of the possibilities and limitations of various materials;
3. to develop skills in the use of basic tools, techniques, and processes to work from concept to finished product;
4. to develop visual, verbal, and written responses to visual phenomena, and organize perception both rationally and intuitively;
5. to make valid assessments of quality and effectiveness in three-dimensional design projects and works of art;
6. to develop the capacity for students to explain and defend their views effectively and rationally.

**Course Requirements**

Studio in Art



**Computer Graphics**

*Credit: 1*  
*Weighting: 0*

**Course Description**

An introductory course for students with little or no computer graphics background. Students will learn how various computer software and hardware components can be used to enhance creative expression. Using Adobe Illustrator and Adobe Photoshop students will create and output professional quality graphics. This course is specially designed for those students needing to develop their creative abilities using the computer.

**Course Requirements**

*None*

**Introduction to Film**

*Credit: 1*  
*Weighting: 0*

**Course Description**

This course will familiarize students with the different artistic elements of cinema, including cinematography, editing, music and sound, and screen-writing. These elements of film will be discussed and viewed in a mix of clips and full-length films. This year, the course will focus on an examination of American film genres.

**Course Requirements**

*None*

**Digital Photography and Graphic Design**

*Credit: 1*  
*Weighting: 0*

**Course Description**

This course is an introduction to the fundamentals of photography using the digital camera, photo editing software, and inkjet printing. The student will be instructed in the techniques of camera work, pre-visualization and how to make and present finished prints. A strong emphasis will be placed on developing aesthetic judgement through a series of assignments and critiques. Classroom lectures will be a combination of technical and aesthetic instruction and discussion on the history of photography as an art form. Printmaking time is an integral part of the course, and facilities will be available outside of class hours.

**Course Requirements**

*None*

**User Design and Experience:**

*Credit: 1*  
*Weighting: 0*

**Course Description**

User Design and Experience: Design IUX (User experience design) is the process of planning the experience a person has when they interact with a product UI (User Interface) design is the user-centered approach to designing the aesthetics of a digital product. Students would learn how to research a company and their users. They would learn how to make personas, competitive audits, identify pain points and create wireframes. Students would take their knowledge and create a low fidelity prototype, test their work with a usability study and eventually make a high fidelity prototype. Students will become proficient in the use of Figma and Adobe UX.

**Course Requirements**

*Digital Photography and Graphic Design*

**Introduction to Piano**

*Credit: .5*  
*Weighting: 0*

**Course Description**

This course is designed for students who wish to develop basic piano skills and beginner technique. Students will gain an understanding of music theory as they learn to read and play music in different genres that is notated in both treble and bass clef. They will have the opportunity to improve their individual playing skills and learn effective practice techniques. In addition, students will play cooperatively in an ensemble and accompany others. Students will develop their performance skills by playing for their peers. At the end of the year, student's hard work will culminate in a full class piano recital. Additional performance opportunities may arise through the year for students that are interested in an extra challenge.

**Course Requirements**

*None*

**Introduction to Theater**

*Credit: .5*  
*Weighting: 0*

**Course Description**

Introduction to Theater is a course designed to introduce students to the world of theater. Exercises to build self-esteem, empathy, and teamwork are integrated into the course along with the technical aspects of drama and stage production. This course will cover basic stage terms and theater etiquette, vocal and movement exercises for performance, and project based learning. Students will participate in theater both on stage and behind the scenes and assist with school productions and performances.

**Course Requirements**

*None*

**Music in Our Lives**

*Credit: 1*  
*Weighting: 0*

**Course Description**

Music in our Lives is a course designed to examine music and its role in our lives. We will study the significance of music as a form of human expression and how it relates to our culture and other cultures. Curriculum will be developed based on the interests of the students enrolled in the course, and will incorporate collaborative and project-based learning.

**Course Requirements**

*None*

**Music Theory**

*Credit: 1*  
*Weighting: 0*

**Course Description**

Music Theory examines the various elements of music and the ways in which these individual elements combine and interact to create a piece of music. In this course, students will become skilled at: reading notes in both treble and bass clef, constructing scales and relating them to key signatures, understanding rhythms in a variety of time signatures and will be proficient at playing all basic band instruments and keyboard at a beginning level. Students will be able to read, write and identify intervals, chords and progressions from different time periods. Music Theory is strongly encouraged for students who intend to pursue a Music Major in college. This course is a pre-requisite for AP Music Theory.

**Course Requirements**

*None*

**AP Music Theory**

*Credit: 1*

*Weighting: 5*

**Course Description**

The AP Music Theory Course corresponds to one or two semesters of a typical introductory college music theory course that covers topics such as musicianship skills, including dictation, analysis and other listening skills. Sight singing and harmony are considered an important part of the course. Through the course, students develop the ability to recognize, understand and describe basic materials and processes of tonal music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also a part of the curriculum through the practice of sight singing. Students understand basic concepts and terminology by listening to and performing a wide variety of music. Notational skills, speed and fluency with basic materials are also emphasized.

**Course Requirements**

Music Theory

**Senior Band**

*Credit: .5*

*Weighting: 0*

**Course Description**

Senior Band is for students having acquired the skills necessary to play music of an upper high school level, as determined by the Band Director. Students in grades 9-12 will typically receive one group lesson per week and the full band will rehearse on Monday, Wednesday and alternating Fridays. Senior Band may participate in any or all of the following: performing for school programs, graduation ceremonies, competing at contests, marching in parades, performing at sporting events, attending field trips, etc. Concerts: 7-12 Winter, 7-12 Spring, and 7-12 Theme Concert. Other possible performances: NYSSMA Solo Festival, community events, Traveling Christmas Ensemble, etc.

**Course Requirements**

Prerequisite: completion of Junior Band; teacher recommendation.

**Senior Chorus**

*Credit: .5*

*Weighting: 0*

**Course Description**

Students in Grades 9-12 are eligible to become a member of Senior Chorus where they will explore a variety of choral music styles in an ensemble setting. Working together as a team is an essential and necessary element of this class. Students will expand their music literacy skills learned in General Music, leading them to become a well-rounded musician. They will also expand their knowledge about their own voice, through further exploration of vocal technique, health, and pedagogy. Chorus will give students the skills to become a better musician and singer, as they will become well informed about their own voice as well as how to use their own voice while singing with others. Students will perform at the following Concerts: 7-12 Winter, 7-12 Spring, and 7-12 Theme and they will also have the option to perform at NYSSMA, All-County, Traveling Christmas Ensemble, or other community events.

**Course Requirements**

*None*

## *Humanities Requirements (Language)*

### *Regents and Advanced Regents Diplomas*

In order to obtain a **Regents Diploma**, a student must earn one foundational art credit and **one language credit**. Students can choose from three foundation courses: Music Theory, Music in Our Lives, or Design, Drawing & Production.

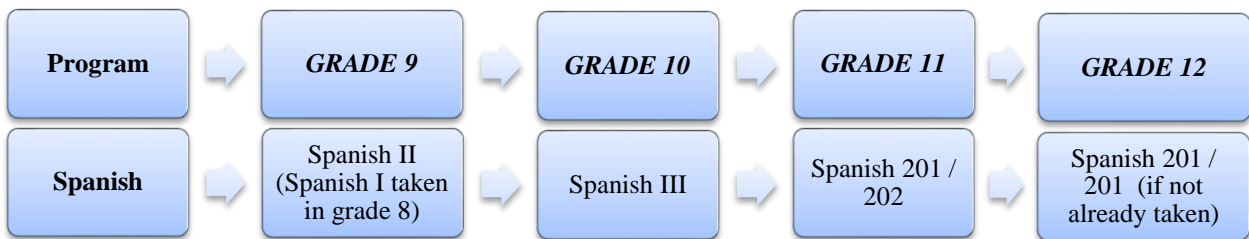
While Spanish is the only language currently offered at WAJ, transfer students may have earned a credit in another language. Students must also pass the Checkpoint A assessment in World Languages, which is usually given after the first credit-bearing language course.

In order to obtain an **Advanced Regents Diploma**, a student must earn three language credits [in the same language] and pass both the checkpoint A and B assessments. Another option for earning the Advanced Regents Diploma is the completion of a 5-year sequence in the content area. (See your counselor for details.) \*If the 5-year sequence is used instead of the three language credits, students will still need to earn one language credit in addition to the 5-year content sequence.

### *Typical Humanities Progressions in Language*

**Note:**

*These are typical progressions in language used at WAJ; however, students may customize progressions to their desired Program of Study-pending administrative approval.*



### Spanish I

Credit: 1  
Weighting: 0

#### **Course Description**

Spanish in the eighth grade is the second half of Spanish I (a continuation of LOTE 7) and will follow Check Point A of the New York State Syllabus. Upon the successful completion of seventh grade, eighth grade and the final exam at the end of eighth grade, students will gain one high school credit. This credit is necessary for high school graduation for all students in New York State. After Spanish I in the eighth grade, students may go on in their study of the language or leave the program. At the end of this course there will be a final exam which will be worth one fifth of the final grade. Upon a very successful experience in Spanish I, students will be recommended for Spanish II.

The main objective in Spanish I is to develop, reinforce, and refine the basic communicative skills of listening, speaking, reading, and writing in the target language. Cultural competency will also be developed and explored throughout the year. Spanish I is the 2nd part of a 2 year world language graduation requirement. Students are expected to pass this course, as well as the Checkpoint A final exam, in order to earn graduation credit.

#### **Course Requirements**

Prerequisite: Students must pass the local exam **AND** the course to receive credit.

### Spanish II

*Credit: 1*

*Weighting: 0*

#### **Course Description**

The Spanish II class will follow Check point B of the New York State Syllabus and standards. Emphasis will be placed on complex grammar structures and some tenses, and a more in depth ability to communicate in all topics in Check points A and B. We will begin reading and listening to longer items of fiction and authentic resources, as well as expanding our vocabulary knowledge, concentrating on everyday occurrences in the past and present. Composition skills will become sharpened as we write longer passages as a preview of what will be expected in Spanish III. At the end of this course there will be a final exam fashioned much like the Spanish III exam with listening, reading, writing, and grammar components.

#### **Course Requirements**

Prerequisite: Students must have passed the Spanish 1B course and local exam.

### Spanish III

*Credit: 1*

*Weighting: 0*

#### **Course Description**

The Spanish III class will follow and complete all requirements of Check point B of the New York State Syllabus. Proficiency in this course consists of being able to read historical pieces of writing in Spanish and answer questions of comprehension, carry on conversations of at least six exchanges, write letters and compositions of 100 words, listen to radio and television broadcasts and have a broad knowledge of cultural nuances in language and practice. This course prepares students for the teacher's local final exam. The local exam replicates the former Regents Exam in format and standard with an additional part concentrating on grammar skills. Upon successful completion of the Spanish III course, students will have satisfied a foreign language sequences necessary for an Advanced Regents Diploma and will be well prepared for Spanish IV and V.

The main objective in Spanish III is to develop, reinforce, and refine the communicative skills in listening, speaking, reading, and writing in the target language. Cultural competency will also be developed and explored throughout the year. Spanish III is the 4th consecutive year of language learning here at WAJ, and the last of a 3 year sequence for the advanced regents diploma.

#### **Course Requirements**

Prerequisite: Spanish II

### Spanish 201

*Credit: 1 (3 college credits)*

*Weighting: 4*

#### **Course Description**

After successfully completing Spanish III, students can go on to take SA 201 for the fall semester. This follows the checkpoint C standards of the New York State Syllabus, as well as the standards of Columbia-Greene Community College. This course is conducted completely in Spanish and is designed for the mature student who can work independently and wishes to perfect their language abilities. In this course we will have a brief review of grammatical concepts and vocabulary from previous years, as well as work on and use reflexive verbs, the future, present subjunctive, and present perfect tenses. We will focus on the four basic comprehension skills of reading, writing, listening, and speaking, in order to raise our level of proficiency, in addition to expanding our cultural knowledge of the Hispanic world.

#### **Course Requirements**

Prerequisite: Spanish III; 80% GPA in the content area.

**Spanish 202**

*Credit: 1 (3 college credits)*

*Weighting: 4*

**Course Description**

SA 202 (spring semester) is a continuation of SA 201, and will emphasize the four basic comprehension skills plus the use of the subjunctive through cultural readings and discussions. Class is conducted entirely in Spanish for extensive practice in listening and speaking skills. This course is conducted completely in Spanish and is designed for the mature student who can work independently and integrate knowledge and research to produce informative and interesting projects. This follows the checkpoint C standards of the New York State Syllabus, as well as the standards of Columbia-Greene Community College. Upon successful completion of this course, students will be awarded 3 college credits.

**Course Requirements**

Prerequisite: SA 201; 80% GPA in the content area

**English as a New Language**

*Credit: 1*

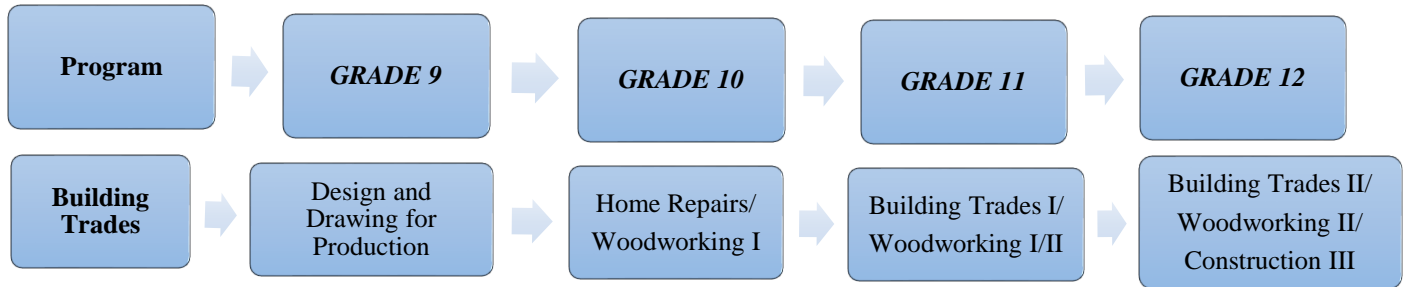
*Weighting: 0*

**Course Description**

This course provides academic support for English Language Learners, including instruction in Basic English vocabulary.

**Course Requirements**

*None*

*Industrial Arts***Woodworking I***Credit: .5**Weighting: 0***Course Description**

Introduction to Woodworking will provide students with foundational skills for a limitless future of recreational or professional woodworking and carpentry. Students will learn shop safety, measuring skills, the safe operation of hand and power tools, as well as woodworking basics. They will work hands-on to create projects out of wood, as well as reimagine pre-built pieces. Students will work with both reclaimed and new wood and lumber and explore a variety of joinery options.

**Course Requirements***None***Woodworking II***Credit: .5**Weighting: 0***Course Description**

This class will prepare students for a variety of careers in the building and construction field. Students will continue to expand their knowledge and expertise using hand and power tools. Further, students will learn about building materials for framing, window and door construction, and finish work. Students will work collaboratively on class projects with real world applications and use.

**Course Requirements**

Prerequisite: Woodworking I

**Construction III***Credit: .5**Weighting: 0***Course Description**

This class prepares students to apply technical knowledge and skills to lay out, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools. The program also includes instruction in areas such as common systems of framing, construction materials, estimating, blueprint reading, and finish carpentry techniques.

**Course Requirements**

Prerequisite: Woodworking I and II

**Home Repair***Credit: .5**Weighting: 0***Course Description**

This class prepares students to apply technical knowledge and skills to address general home repair tasks incorporating skills in the areas of plumbing, electric, and construction.

**Course Requirements**

Prerequisite: Woodworking I and II

**Building Trades***Credit: 2.5**Weighting: 0***Course Description**

Building Trades provides basic technical knowledge and safety skills to begin preparing students for a career in the field. Students will learn about the importance of safety and personal protection in all aspects of construction. This program exposes students to the opportunities available in the architecture and construction industry, including occupations such as a carpenter, electrician, plumber, air conditioning technician, safety supervisor, architect, engineer, and other occupations. Students learn about the processes involved in construction projects and engage in a variety of small projects. Hands on lessons provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. This program provides experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

At the completion of the Building Trades program, students will be able to apply the trade skills necessary for entry-level employment, apprenticeships and post-secondary education. Students will study and practice safety training, framing, roofing, door and window installation, hand and power tool use, concrete, masonry and bricklaying, blueprint reading, plumbing, electrical, and construction equipment and rigging. Students will learn the theory of the construction process and have the opportunity to put those theories into practice with authentic, hands-on, project-based activities. Students will also have the opportunity to earn the NCCER (National Center for Construction Education and Research) Construction Core as well as the OSHA 10 certifications, recognized throughout the construction industry as indicators that the individual is job ready.

**Course Requirements**

Prerequisite: Algebra, Entrance Application, Teacher Recommendations, and Interview



### Math Requirements

*Regents Diploma*

3 units of math plus a grade of 65% on at least one mathematics examination (usually Algebra I).

*Advanced Regents Diploma*

3 units of credit and a grade of at least 65% on the Algebra I, Geometry, and Algebra II examinations

Possible pathways are as follows:

- Algebra I
- Geometry
- Algebra II

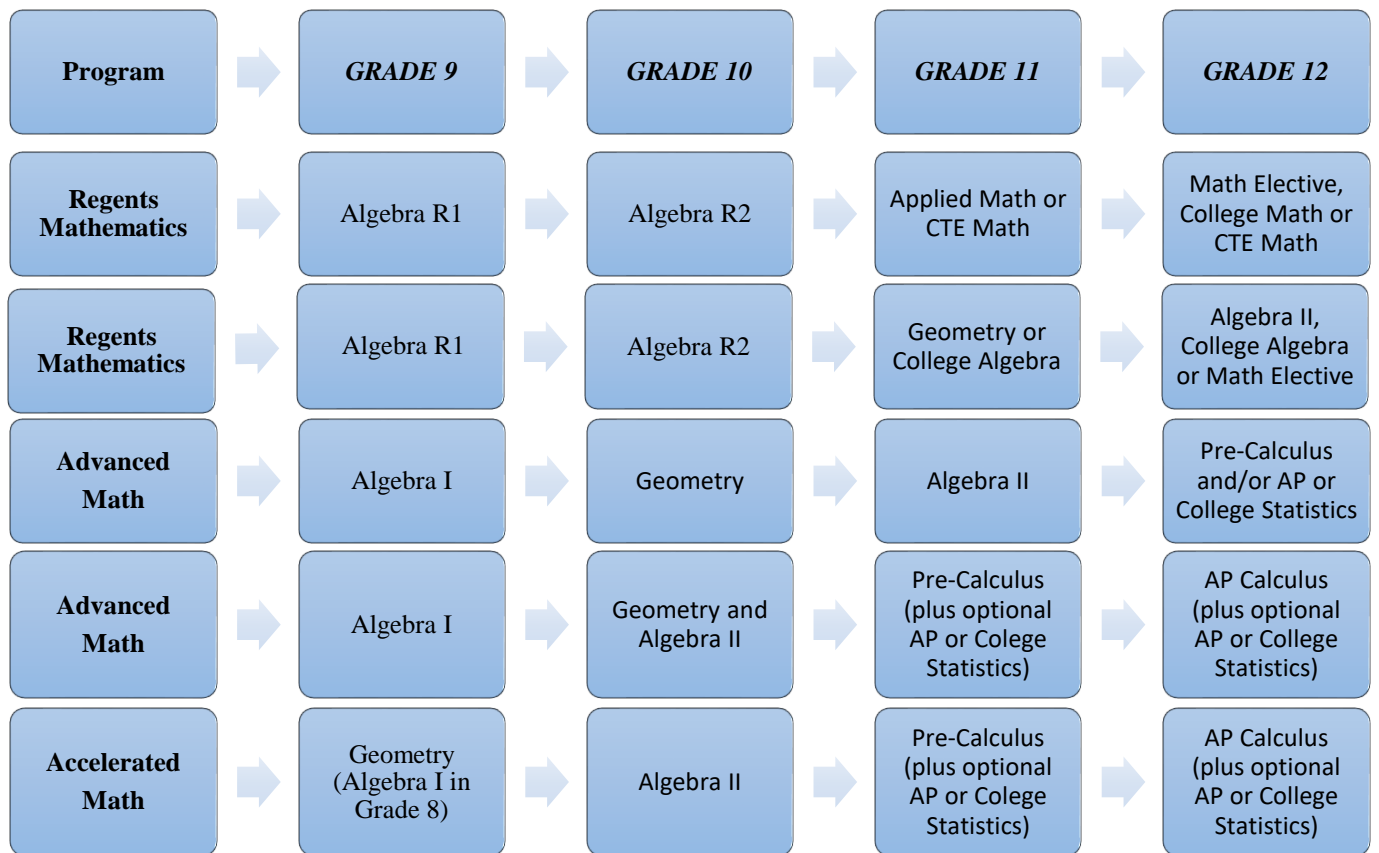
OR

- Algebra R1
- Algebra R2
- Geometry
- Algebra II

*Typical Mathematics Progressions*

**Note:**

*These are typical progressions in mathematics used at WAJ; however, students may customize progressions to their desired Program of Study-pending administrative approval.*



### Algebra I

*Credit: 1*

*Weighting: 0 (1 for accelerated students)*

#### **Course Description**

This course is the first course in a three year Regents math sequence. Topics include the real number system, solving equations and inequalities, linear equations and inequalities, systems of linear equations and inequalities, linear functions, quadratic functions, polynomial functions, exponential functions and basic statistics. The Algebra I Regents exam is given in June and students MUST pass it to earn a Regents diploma. Note: Algebra I may **NOT** be taken simultaneously with Geometry.

Algebra I is the first mathematics course in high school and the focal point is functions; specifically linear, quadratic, and exponential functions. It introduces students to variables, algebraic expressions, equations, inequalities, functions, and all their multiple representations. This class will cover all topics stated in the NYS Algebra 1 curriculum; it culminates in the Algebra 1 Regents Exam in June. Success in this course must be encouraged and emphasized since passing both the Algebra 1 course and regents are part of the New York State graduation requirement!

#### **Course Requirements**

Teacher recommendation (A TI-Nspire Graphing calculator will be provided)

### Algebra RI

*Credit: 1*

*Weighting: 0*

#### **Course Description**

This is the first year of a two year Regents Algebra course and will provide one math credit. Students will take the Algebra I Regents exam during the second year course (10<sup>th</sup> grade, R2). Topics include solving equations and inequalities, linear equations and inequalities, systems of linear equations, and inequalities, linear functions, quadratic functions, polynomial functions and basic statistics. Some topics will be covered in totality during this course, while others will only be partially covered as a foundation for R2.

This course is a study of the first half of Algebra 1 designed to develop the algebraic concepts and processes that can be used to solve a variety of real-world mathematics problems. Next year, the students will take Algebra 2 to complete their study of Algebra. (You will take the NYS Algebra Regents in January of next year) Upon passing this course, you will have earned your 1<sup>st</sup> HS math credit. (You need at least 3)

#### **Course Requirements**

Teacher recommendation (A TI-Nspire Graphing calculator will be provided)

### Algebra R2

*Credit: 1*

*Weighting: 0*

#### **Course Description**

This is the second year of a two year Regents algebra course. Students will review R1 material and cover remaining standards set forth by NYS. The Algebra I Regents exam is given in January and again in June, if necessary, and students MUST pass it to earn a Regents diploma.

This course is the second year of Algebra 1. We will elaborate on some of the topics we covered last year, and introduce some new ones. You will take the NYS Algebra Regents in January. Upon successful completion of R1 and R2 you will have earned 2 of your 3 math credits needed to graduate. When you pass the Algebra 1 Regents, you will have earned your 1 required Math Regents.

#### **Course Requirements**

Teacher recommendation (A TI-Nspire Graphing calculator will be provided)

**Algebra II***Credit: 1**Weighting: 0 (2 if taken as an optional "Upper Level Academic", 4<sup>th</sup> year math course)***Course Description**

This course is the third course in a three year math sequence designed for students entering a four-year university. Strong emphasis will be placed on algebraic manipulation of equations. Topics include Polynomial, Rational, and Radical Relationships, Trigonometric Functions, Functions, and Inferences and Conclusions from Data. The Common Core Algebra II /Trigonometry Regents exam is given in June, which students must pass to receive an Advanced Regents Diploma. Algebra 2 may be taken simultaneously with Geometry R pending math department approval. Students taking both courses must have earned a 90 every quarter of Integrated Algebra and passed the Integrated Algebra Regents with a minimum of 85. Algebra 2 may NOT be taken simultaneously with Pre-Calculus.

**Course Requirements**

Prerequisite: satisfactory completion of Geometry.

**AP Calculus AB***Credit: 1**Weighting: 5***Course Description**

AP Calculus AB focuses on students' understanding of calculus concepts and provides experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), each course becomes a cohesive whole, rather than a collection of unrelated topics. Calculus AB students use definitions and theorems to build arguments and justify conclusions. The courses feature a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Teachers and students should regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

**Course Requirements**

Prerequisite: successful completion of Pre-Calculus.

**AP Computer Science Principles***Credit: 1**Weighting: 5***Course Description**

Computer Science Principles (CSP) is a PLTW course to implement the College Board's new AP CS Principles framework. Students work in teams to develop computational thinking and solve problems. The course does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. The course also aims to build students' awareness of the tremendous demand for computer specialists and for professionals in all fields who have computational skills. Each unit focuses on one or more computationally intensive career paths. The course also aims to engage students to consider issues raised by the present and future societal impact of computing.

**Course Requirements**

Prerequisite: *None*

### AP Statistics

Credit: 1

Weighting: 5

#### **Course Description**

The AP Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills, and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics.

#### **Course Requirements**

Prerequisites: The AP Statistics course is an excellent option for any secondary school student who has successfully completed a second-year course in algebra and who possesses sufficient mathematical maturity and quantitative reasoning ability

### Applied Math

Credit: 1

Weighting: 0

#### **Course Description**

This is the third course in a three year math sequence and will provide one math credit. This class will introduce students to everyday math concepts including creating a budget, interest calculations (mortgage payments, car payments, student loans, savings and investments) calculating income tax, business modeling, scheduling problems, using algorithms, and other real world math situations. Algebra R or

#### **Course Requirements**

Prerequisites: Algebra I or Algebra R1 and R2.

### Applied Math Robotics I

Credit: .5

Weighting: 0

#### **Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

#### **Course Requirements**

Prerequisite: Student must be enrolled in Robotics Engineering I (.5 credit) at the same time as this course; instructor approval needed. One-half semester credit will be given for *each* course: Applied Mathematics Robotics I and Robotic Engineering I.) (Limit 10 students)

**Applied Math Robotics II**

*Credit: .5*  
*Weighting: 0*

**Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

**Course Requirements**

Successful completion of Applied Math Robotics I **and** Robotic Engineering I is a prerequisite for this second-level course. Instructor approval is also required.

**Applied Math Robotics III**

*Credit: .5*  
*Weighting: 0*

**Course Description**

It is crucial for students to develop algebraic thinking and engineering design skills as we prepare to compete in the global economy. Algebraic thinking involves identifying patterns, relationships, and functions between one or more objects and being able to find the interrelationships between the variables that make up the objects; it is the beginning of symbolic reasoning. Engineering design skills provide students with a systematized methodology for solving complex problems; it is rigorous creativity. The Robot Algebra Project uses classroom friendly technologies to develop students' algebraic thinking and reasoning skills by placing them in technology-rich problem solving situations where they must find the mathematical rule of principle to unlock the solution to the problem and then apply that rule across multiple contexts.

**Course Requirements**

Successful completion of Applied Math Robotics II and/or Robotic Engineering II is a prerequisite for this third-level course. Instructor approval is also required.

**College Algebra**

*Credit: 1 (3 college credits)*  
*Weighting: 4*

**Course Description**

This is a reform math course. Students will work in collaborative groups on activities in which the mathematics arises from context. Real life data is interpreted numerically, symbolically and graphically. Topics include: linear, quadratic, rational and exponential functions.

This course is for college students who have successfully completed elementary algebra or the equivalent. This is a reform math course. Real life data is interpreted numerically, symbolically and graphically. Topics include: linear, quadratic, rational and exponential functions. NOTE: The TI-83/84 Plus calculator is required. (4 semester hours) This course cannot be taken as a pre-requisite for Pre-calculus. This course fulfills the SUNY General Education requirements for Mathematics (and Quantitative Reasoning).

**Course Requirements**

Prerequisite: successful completion of Algebra I or Algebra R1, A TI Nspire calculator will be supplied.

**College Statistics 102***Credit: .5 (3 college credits)**Weighting: 4***Course Description**

This course introduces students to the basics of descriptive and inferential statistics. The topics covered include data analysis, measures of central tendency and measures of dispersion, correlation and regression, probability and probability distributions, and confidence intervals and hypothesis testing. This course fulfills the SUNY General Education requirement for Mathematics.

**Course Requirements**

Prerequisite: enrolled in Algebra II or successful completion of Algebra II, 80% GPA in math content area.

**Computer Applications 105***Credit: .5 (3 college credits)**Weighting: 4***Course Description**

This course examines how to use computers to solve problems, write reports, and summarize data. Simple word processing, spreadsheets, database management, and presentation software will be learned using Microsoft Office. Programming a computer will not be studied.

**Course Requirements**

Prerequisite: 80% GPA

**Geometry***Credit: 1**Weighting: 0***Course Description**

This course is the second course in a three year math sequence designed for students entering a four-year university. Primary focus throughout this course will be on geometric reasoning to develop theorems to write proofs using congruence statements. Students will model theorems using constructions and patty paper labs. Topics include basic constructions, coordinate geometry, locus, transformations, logic used to prove theorems, parallel and perpendicular lines, congruent triangles, quadrilaterals, similarity, right triangle trigonometry, circles, and modeling applications using surface area and volume. The (Common Core) Geometry Regents exam is given in June, which students must pass to receive an Advanced Regents Diploma. Geometry may be taken simultaneously with Algebra 2 pending math department approval. Students taking both courses must have earned a 90 every quarter of Algebra I and passed the Algebra I Regents with a minimum of 85.

**Course Requirements**

Prerequisite: Satisfactory completion of Algebra I or Algebra R1 AND R2.

**Precalculus (MA 111)***Credit: 1 (3 college credits)**Weighting: 4***Course Description**

This is the fourth year of math required by most 4-year colleges. Students are expected to have passed all three math regents courses and exams, Algebra I, Geometry, and Algebra II. Topics covered include (but are not limited to) Functions, Trigonometric Functions, Graphs and Inverse of Trigonometric Functions, Applications of Trigonometry, Trigonometric Identities and Equations, Polynomial Functions, Exponential and Logarithmic Functions, and Matrices and Vectors. An emphasis to prepare students to take the AP Calculus course as a senior in high school or as a freshman in college is present in this course.

**Course Requirements**

Prerequisite: Satisfactory completion of Algebra II, a 65% or higher on the Algebra II Regents exam, and recommendation of the instructor; 80% GPA in math content area

## Science Requirements

### Regents Diploma

In order to obtain a Regents Diploma, a student must earn **3 units of science credit** plus a grade of 65% on at least one science Regents examination. (Usually Earth Science or Living Environment)

### Advanced Regents Diploma

In order to obtain an Advanced Regents Diploma, a student must earn 3 units of science credit and a grade of at least 65% on three science Regents examinations. One credit must be a life science credit and one credit must be a physical science credit.

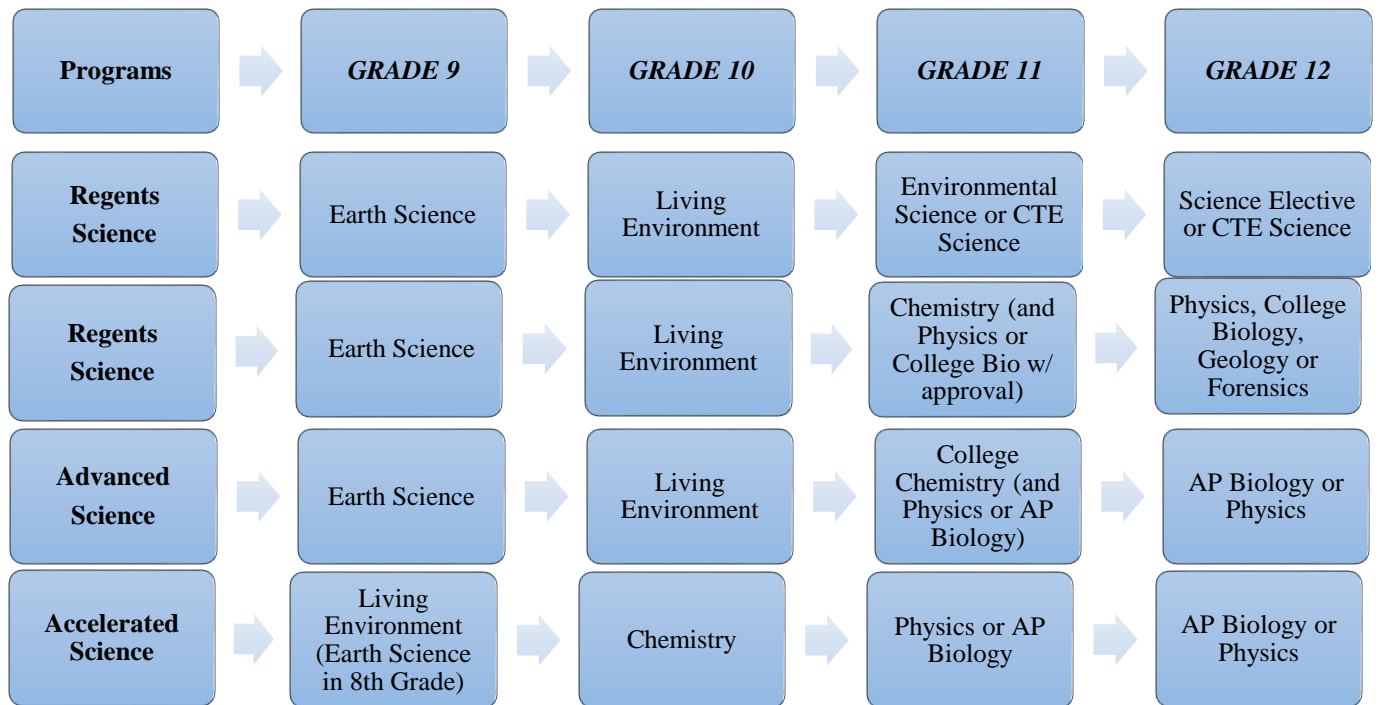
The traditional pathway is as follows:

- Earth Science
- Living Environment
- Chemistry and/or Physics

### Typical Science Progressions

**Note:**

*These are typical progressions in science used at WAJ; however, students may customize progressions to their desired Program of Study-pending administrative approval.*



**Chemistry***Credit: 1**Weighting: 0***Course Description**

This is a one year Chemistry course that includes a 1200 minute laboratory component. This laboratory component is a requirement for the Regents exam given in June. Some of the major topics covered are: Atomic structure and Chemical Bonding, Mathematics of Chemistry, Physical Behavior of Matter, The Periodic Table, Acids and Bases, Oxidation and Reduction, Kinetics, Organic Chemistry and Nuclear Chemistry.

**Course Requirements**

Algebra, Earth Science, Living Environment; 80% average in previous science content (exceptions to be approved by HS counselor and chemistry teacher)

**Forensic Science 141***Credit: 1**Weighting: 4***Course Description**

For the non-science major, an introduction to the basic scientific theory and techniques used in criminal investigation. Topics include proper handling and preservation of crime-scene evidence; glass, soil, fingerprint, drug and paint chip examination, hair analysis; cloth, fiber, the uses of spectrophotometry, chromatography, and other instrumental methods in evidence analysis. Also, the description of serological techniques, DNA profiling, and toxicological techniques. Course covers sufficient inorganic and organic chemical concepts for students to gain an elementary understanding of the various analytical techniques.

**Course Requirements**

Prerequisite: 80% GPA in the science content area.

**Forensics***Credit: 1**Weighting: 0***Course Description**

Forensics is available as an upper level science elective; this course provides an introduction to the basic scientific theory and techniques used in criminal investigation. Course topics include: proper handling and preservation of crime scene evidence including glass, soil, fingerprints hair, fibers, blood and paint. The course is designed for the high school student to develop an understanding of the methods used by forensic scientists including observation, measurement, data collection, hypothesis development and evaluation of evidence.

**Course Requirements**

*None*

**Earth Science***Credit: 1**Weighting: 0***Course Description**

This is a one year Earth Science course that includes a 1200 minute laboratory component. This laboratory component is a requirement for the Regents exam given in June. Some of the major topics covered are: Rocks and Minerals, Plate Tectonics, Earth's History, Meteorology, Climate, and Astronomy.

**Course Requirements**

*None*



### Environmental Science

*Credit: 1*

*Weighting: 0*

#### **Course Description**

Environmental Science is a year-long course designed to show thematic connections between science, technology, and society. Students will gain an understanding of the basic causes of major environmental issues and examine them from ethical and economic standpoints. Students will apply prior scientific knowledge to current environmental issues and will become better-informed citizens and decision-makers.

#### **Course Requirements**

None

### Anatomy and Physiology

*Credit: 1*

*Weighting: 0*

#### **Course Description**

Anatomy and Physiology is a study of the structure and function of the human body. Topics covered in the course include the study of cells, tissues and organs in the following systems: integumentary, skeletal, muscular, nervous, endocrine, circulatory, digestive, respiratory, excretory and immune. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. This course is designed for students with an interest in the human body or wishing to pursue a career in a health related field.

#### **Course Requirements**

None

### General Biology 101

*Credit: .5 (4 college credits)*

*Weighting: 4*

#### **Course Description**

This course provides an introduction to the basic foundations and concepts of biology, including the nature of life; the cell, energy, and the chemical phenomena that life depends on. Biology 101, in conjunction with its second semester companion course, gives an overview of the whole field of biology and is the first course for students who want to major in the life sciences. Laboratory exercises provide opportunity for reinforcing major themes discussed in class, as well as an opportunity to conduct inquiry-based investigations.

#### **Course Requirements**

Prerequisite: 80% or higher in prior science coursework and Earth Science and Living Environment Regents

### General Biology 102

*Credit: .5 (4 college credits)*

*Weighting: 4*

#### **Course Description**

This course is a continuation of BI 101 and provides an introduction to the basic foundations and concepts of biology, including zoology, genetics, and evolution. Students entering the course must be trained in the use of a compound microscope and be familiar with the concepts of cell anatomy, cell division, protein synthesis and animal reproduction. Laboratory exercises provide opportunity for reinforcing major themes discussed in class, as well as an opportunity to conduct inquiry-based investigations. NOTE: Lab includes animal dissection

#### **Course Requirements**

Prerequisite: 80% or higher in prior science coursework and Earth Science and Living Environment Regents

**General Chemistry 101***Credit: .5 (4 college credits)**Weighting: 4***Course Description**

A comprehensive introduction to chemical theories. Major topics include dimensional analysis, atomic structure, chemical formulas, names and equations, stoichiometry, ideal gas laws, periodic properties of elements, chemical bonding, and molecular geometry

**Course Requirements**

Completion of Algebra II with a grade of 75% or better or completion of MA 110 (College Algebra); 80% GPA in science content overall

**General Chemistry 102***Credit: .5 (4 college credits)**Weighting: 4***Course Description**

A continuation of General Chemistry with emphasis on systems at equilibrium. Major topics include properties of solid, liquid, and gaseous matter, phase changes, solution characteristics, chemical kinetics, chemical equilibrium, acid-base equilibria, thermodynamics, and electrochemistry.

**Course Requirements**

Prerequisite: CH 101 with a grade of C or better; 80% in science content area overall

**Living Environment***Credit: 1**Weighting: 0***Course Description**

The Living Environment is a high school level biology course which includes a 1200 minute laboratory component. Curriculum follows the New York State P-12 science learning standards. This course is specifically designed to prepare students for the Living Environment Regents Exam. Topics covered in this course include: scientific inquiry, cell structure/function, genetics, growth and reproduction, the human body, and ecosystem dynamics.

**Course Requirements**

*None*

**Physics***Credit: 1**Weighting: 0 (or 2 if taken as an "Upper Level Academic", 4<sup>th</sup> year science course)***Course Description**

This is a one year Physics course that includes a 1200 minute laboratory component. This laboratory component is a requirement for the Regents exam given in June. Some of the major topics covered are: Mechanics, Energy, Electricity and Magnetism, Wave Theory, and Modern Physics. This course relies heavily on math skills and a solid understanding of scientific measurement.

**Course Requirements**

Algebra and Geometry

**AP Biology***Credit: 1**Weighting: 5***Course Description**

AP Biology is the equivalent of a two-semester college introductory biology course normally taken by science majors during their first year of college. AP Biology is designed to be taken by students after successful completion of high school biology and chemistry. If the student has not yet taken chemistry, then it must be taken concurrently with AP biology. The course goal is to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Primary emphasis will be on developing an understanding of biological concepts such as science as a process, personal experience in scientific inquiry, and recognition of unifying themes that integrate the major topics of biology. AP Biology differs from regular high school biology through the use of a college-level text, a greater range and depth of topics covered, a faster pace of instruction, and more sophisticated laboratory work.

**Course Requirements**

Biology and Chemistry

**Introduction to Agriculture, Food, and Natural Resources (AFNR)***Credit: 1**Weighting: 0***Course Description**

Introductory course in Agriculture, Food, and Natural Resources that offers a wide range of agricultural opportunities and the potential pathways of study in AFNR. Students use their introductory knowledge and skills to further their agricultural education. Practical skills and applications are woven into the course activities to develop students' future employability. Students will experience hands-on activities, projects, and problems involving communication in the science of agriculture, plants, animals, natural resources, and agricultural mechanics. Incorporating items relating to everyday agriculture, future preparation through CTE, the science of agriculture, the science of food, and natural resources. The course includes agricultural education, which is a combination of agriculture and groups such as FFA (Future Farmers of America), communication methods, science processes, natural resources, plants and animals, and agricultural mechanics.

**Course Requirements***None***Animal Science***Credit: 1**Weighting: 0***Course Description**

Students will learn the principles of agriculture, animal science, and related career options, along with learning activities that involve background and social issues of animal science, animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. In addition, students will acquire skills in understanding animals' needs, allowing them to consider the perceptions and preferences of individuals within agriculture in the local, regional, and world markets. Students will learn the characteristics of animal science and work on projects and problems similar to those of animal science specialists, veterinarians, zoologists, livestock producers, and industry personnel. Students will learn the connection between animal science lessons and FFA (Future Farmers of America) components essential to an informed agricultural education student.

**Course Requirements***None*

**Plant Science**

*Credit: 1*

*Weighting: 0*

**Course Description**

The plant science course provides a foundation of plant science knowledge and skills where students will be able to experience various plant science concepts through the study of plant anatomy and physiology, classification, and the fundamentals of planting and harvesting. Students will learn to apply scientific knowledge and skills to use plants in agronomic, forestry, and horticultural industries. Therefore, discovering the value of plant production and its impact on the individual, local and global economy. The course intends to build on the Introduction to Agriculture, Food, and Natural Resources foundation. Units of study included in Plant Science include mineral soils, soilless systems, anatomy and physiology, taxonomy, the growing environment, plant reproduction, surviving a harsh climate, and crop production and marketing.

**Course Requirements**

*None*

## Social Studies Requirements

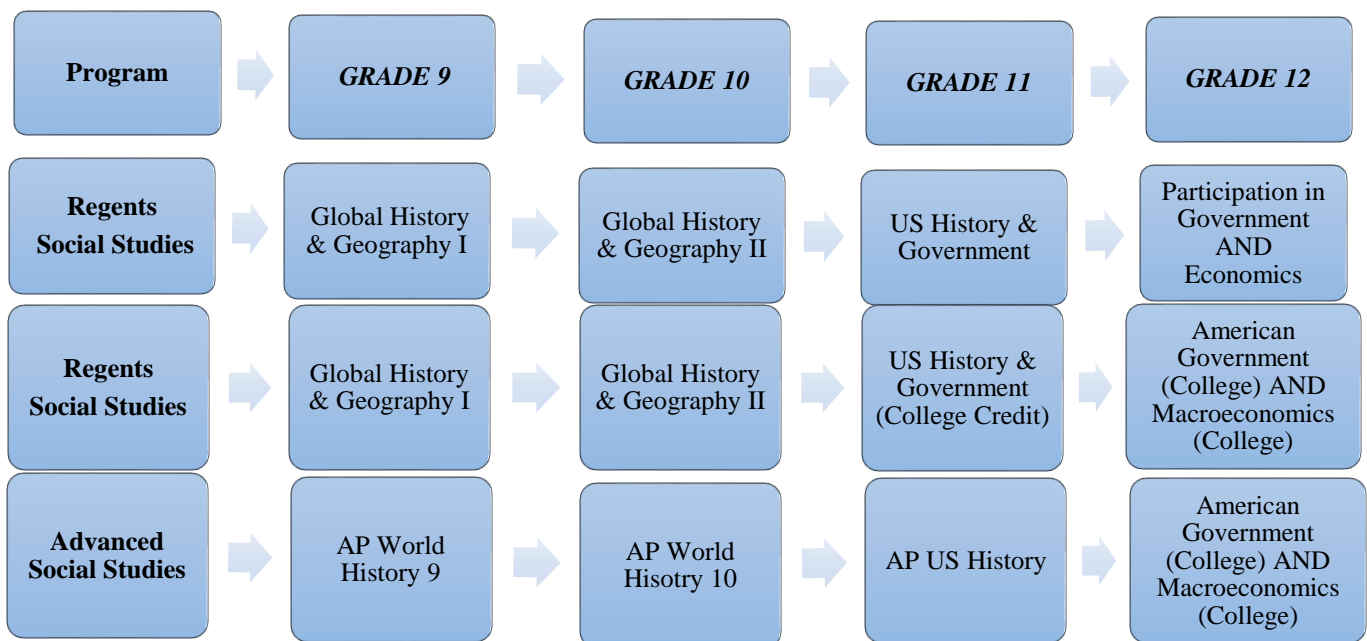
### Regents and Advanced Regents Diploma

In order to obtain a Regents Diploma or an Advanced Regents Diploma, a student must earn 4 units of social studies credit plus earn a grade of 65% on the Global History and US History Regents exams. (\*Note: A student will only need one of these Regents exams if the student is using another pathway towards graduation. See your counselor for details.)

### Typical Social Studies Progressions

**Note:**

*These are typical progressions in social studies used at WAJ; however, students may customize progressions to their desired Program of Study-pending administrative approval.*



### American Government (PS 101)

*Credit: .5 (3 college credits)*

*Weighting: 4*

#### Course Description

An analysis of the American political system, with emphasis on the Constitution. Topics include American conservative and liberal political traditions, political parties, and the organization and operation of the executive, judicial, and legislative branches of government. This course satisfies the Government requirement for graduation.

An analysis of the American political system, with emphasis on the Constitution. Topics include American conservative and liberal political traditions, political parties, and the organization and operation of the executive, judicial, and legislative branches of government. This course fulfills the SUNY General Education requirements for Social Sciences.

#### Course Requirements

80% GPA in social studies content area

**AP United States History***Credit: 1**Weighting: 5***Course Description**

The AP program in United States History is designed to provide students with the analytical skills and enduring understandings necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. Students will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format and through classroom seminars.

The Advanced Placement United States History course focuses on the development of historical thinking skills and engages students in content learning objectives organized around seven themes (skills and themes listed below). This college-level course is in line with U.S. history survey courses offered across diverse colleges and universities. The course allows considerable instructional flexibility across nine different periods of U.S. history beginning in 1491 and ending with modern day. In May, students will take the AP Exam in United States History. Eligibility for college credit is based on individual institutions, but acceptance of AP courses for college credit begins with a score of 3. After the AP Exam, students will prepare for the NYS Regents in United States History and Government (Framework) to be given in June.

**Course Requirements**

Prerequisite: Global II and teacher recommendation, 85% GPA in social studies

**AP World History: Ancient (Grade 9)***Credit: 1**Weighting: 5***Course Description**

In AP World History: Ancient, students investigate significant events, individuals, developments, and processes from pre-history to 1200. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

**Course Requirements**

Prerequisite: 85% or above average in US History 8 and teacher recommendation.

**AP World History: Modern (Grade 10)***Credit: 1**Weighting: 5***Course Description**

In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

**Course Requirements**

Prerequisite: 85% GPA in AP World: Ancient (Grade 9).

**Contemporary Global Issues (PS 104)**

*Credit: .5  
Weighting: 4*

**Course Description**

Wars, revolutions, human rights, terrorism, natural and man-made disasters, international trade and economic issues impact the entire global community. This course is designed to acquaint the student with the tools and methods to analyze the historical, political, and industrial precursors leading up to these events. With this practical and theoretical foundation, students will be able to understand and engage in informed discussions about the important global issues in the coming decades.

**Course Requirements**

80% GPA in social studies content area

**Economics**

*Credit: .5  
Weighting: 0*

**Course Description**

We live in a world in which we make important choices every day. The choices we make regarding how we will utilize the resources available to us is the foundation of economics. Understanding fundamental economic concepts will prove to assist you in making these very important choices during your lifetime. Some of the topics/ideas you will learn about in this course include but are not limited to: Personal Financial Management, Factors of Production, Opportunity Cost, Supply and Demand, and the American Economy.

**Course Requirements**

Global 1, Global II, US History

**Global History & Geography I (Before 1750)**

*Credit: 1  
Weighting: 0*

**Course Description**

This course, the first half of the Regents' course, is designed to provide students with an understanding of the major ideas, eras, themes, developments, and turning points in world history and geography, from prehistory to approximately the First Global Age in the 18th Century. It prepares students to move into the second half of the Regents' course with a solid knowledge base of the traditions and history of the modern world.

**Course Requirements**

None

**Global History & Geography II (1750-Present)**

*Credit: 1  
Weighting: 0*

**Course Description**

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in World History and Geography and examine the broad sweep of history from a variety of perspectives. Major units of study include An Age of Revolution, A Half Century of Crisis and Achievement, the world since 1945, and Global Connections and Interactions. Major themes and concepts are History, Political Science, Geography, and Economics. The Global Studies Regents exam is taken at the conclusion of this course. Beginning June 2019, this exam will only cover content after 1750.

**Course Requirements**

Successful completion of Global History & Geography I

**Introduction to Sociology (SO 101)**

*Credit: .5 (3 college credits)*

*Weighting: 5*

**Course Description**

An introduction to and overview of the field of sociology. Gives students a basic working knowledge of the institutions present in American society and their relationship to power, conflict, and social change.

**Course Requirements**

80% GPA

**Macroeconomics (EC 101)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

An analysis of industry structures: pure competition, monopoly, monopolistic competition (oligopoly), business costs and the determination of optimal production levels. An in- depth examination of important economic issues such as financial insecurity, the environment and energy policies and a discussion of alternative approaches to addressing these issues. Students will analyze information including that which is presented graphically, and use concepts such as externalities and cost-benefit analysis. This course satisfies the Economics requirement for graduation.

**Course Requirements**

80% GPA in social studies content area

**Participation in Government**

*Credit: .5*

*Weighting: 0*

**Course Description**

This course is one half of the senior social studies requirement for graduation. The course content is interdisciplinary, for it is drawn from areas beyond the defined social studies curriculum. It includes life experience beyond classroom and school. The curriculum is related to problems or issues addressed by students and where possible, real and substantive issues at local, state, national and global levels. The curriculum is in the form of intellectual processes or operations necessary to deal with data generated by the problems or issues addressed by students.

**Course Requirements**

Prerequisites: Global I, Global II, and US History

**Psychology (PY 101)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

An overview of the scientific discipline of psychology, including some of the methods and basic concepts of the field and major aspects of human behavior, such as emotion, learning, conditioning, motivation, personality, and development.

**Course Requirements**

80% GPA



**US History 1492-1865 (HI 103)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

A survey course that begins with an overview of United States history from colonial times into the 21st century. The primary emphasis will focus on the development of a constitutional system as well as the social and economic events that helped shape early America. Topics include the Colonial period, American Revolution, the ratification of the Constitution, Jacksonian democracy, the forces that led to the development of the Civil War and the lingering impact of the war on contemporary America.

**Course Requirements**

80% GPA in the social studies content

**US History 1865-Present (HI 104)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

A survey course that begins with an overview of United States history from colonial times into the 21st century. The primary emphasis will focus on the major forces that shaped the social, political and economic developments of post-Civil War America. Topics will include Reconstruction, westward expansion, the Industrial Revolution, immigration, the Great Depression, the world wars, and the emergence of the United States as a world power.

**Course Requirements**

80% GPA in the social studies content

**US History & Government**

*Credit: 1*

*Weighting: 0*

**Course Description**

Through the study of United States history and government from the 17th century to the present, students will be introduced to political, social, economic and cultural developments and interactions. The following topics and themes will be covered: Constitutional principles, institutions of government, foreign policy, economic systems and their political impact, immigration and diversity, citizenship, civil rights and liberties, reform movements, and historical significance of science and technology.

**Course Requirements**

Prerequisite: Global II

**History of the Catskills**

*Credit: 1*

*Weighting: 0*

**Course Description**

This course will focus on local history with an emphasis on Greene County, the larger Catskills and the Hudson Valley. Much of the course will be student driven and research-based allowing students to explore topics that are of interest to them using a rich array of primary and secondary sources. Topics the course may include: early settlement of local communities, development of transportation networks, the local tourism industry, and local economic development including agriculture and industry, and the role of the local community in larger state, national and international events. Course may also include: guest speakers, oral history projects, field trips to places of local historic interests, and presentations.

**Course Requirements**

*None*

**The Civil War (HI 221)**

*Credit: .5 (3 college credits)*

*Weighting: 4*

**Course Description**

This course is an in-depth study of the events leading up to the American Civil War and the military and political history of the war. It will also include a short look at the consequences of the war. Students will examine military and political objectives and strategies, evaluate different versions of the same events, and explore alternative resolutions to historical issues. This course will require reading of primary and secondary texts, critical thinking, round table-type classroom discussion, and persuasive writing.

**Course Requirements**

HI 103 or HI 104, or a score of 85% or above on the NYS Regents exam in American History

**Food History**

*Credit: .5*

*Weighting: 0*

**Course Description**

This elective examines the origins, spread, and uses of food and beverages in history. In addition to the study of these commodities, students will have the opportunity to prepare native and modern dishes using the ingredients of study as a focus.

**Course Requirements**

None