We are confronted with an ever-changing society. It is essential to equip our students not only to survive in that society, but also to manage their life experiences effectively. Among the challenges facing our students are:

- The uncertainties of our world in a time of new scientific, environmental, economic, political and social realities;
- Problems related to our economic, political and social systems;
- The questioning of fundamental social institutions, traditional values, and the introduction of new cultural patterns;
- The threat to individual rights, dignity and freedom

The task of our school district is to prepare students to deal effectively with these challenges in order to live successfully and happily. Since they will be asked to identify or choose from a vast array of alternative possibilities, OUR PURPOSE IS TO PREPARE HUMANE CRITICAL THINKERS, DECISION-MAKERS AND PROBLEM SOLVERS. To accomplish this, our students must develop and utilize:

- Intellectual curiosity and eagerness for lifelong learning
- A positive self-image based on a realistic acceptance of self
- The knowledge, skills and attitudes of maintaining physical well-being throughout their lifetimes
- Fundamental skills of computation and communication, including demonstrating, observing, speaking, listening, reading and writing
- Aesthetic appreciation and self-expression in the fine, performing, practical and popular arts
- The ability to think and evaluate constructively and creatively
- Self-discipline including effective work habits and responsible behavior
- An understanding of a variety of processes that can be used in decision-making situations
- Interpersonal and group dynamic skills
- Ethical and moral behavior based on respect and appreciation for human values, beliefs and the rights of others
- An awareness of our relationships to the family and to local, national and world communities
- A knowledge of our American heritage, its civil rights and responsibilities
- An understanding of the various types of work, and their function in and contribution to society

The effective implementation of this philosophy shall require the acceptance, support and participation of the Board of Education, staff, students and community. We commit ourselves to providing the necessary efforts, means and resources.

The mission of the Wappingers Central School District is to empower all of our students with the competencies and confidence to challenge themselves, to pursue their passions, and to realize their potential while growing as responsible members of their community.
January 2019

Dear Students and Families,

Over the next few weeks, you will be assisting your son or daughter in selecting courses for the 2019-20 school year. Our schools and the State of NY Education Department are encouraging all students to achieve higher standards. Please take the time to review carefully his or her selections. There are a few changes in this year’s course selection guidebook, so please review each course carefully.

Throughout the year, we have many occasions to talk with graduates of our high schools. Without a doubt, the most common regret expressed by our alumni is, “I wish I had challenged myself more in high school.” A great majority of John Jay, Roy C. Ketcham, and Orchard View students do quite well in college and in post-high school careers. Those who do not perform as well as they would like, typically “took the path of least resistance” in high school.

In today’s competitive work force and global economy, more and more education is clearly necessary. Good choices now will pave the way toward good opportunities in the future. It is our sincere hope that each of our students, upon graduation, will return to your respective schools and make the comment, “I’m glad I worked hard in high school. It has really paid off.”

Our counseling staff and teaching faculty are willing and ready to assist in the process of course selection. Visit the guidance office and the career information centers in both high schools to gain the information you need to make informed choices. Please feel free to speak with your grade administrator or building principal as well as with your school counselor in making these important decisions. Work hard in high school and you will find the effort is well-rewarded whatever your future plans may be.

Sincerely,

David Kedzielawa, Principal
David Seipp, Principal
Laura DiStefano, Principal
John Jay High School
Roy C. Ketcham High School
Orchard View Alt. High School

Steven Shuchat, Principal
Terrence Thompson, Principal
Van Wyck Junior High School
Wappingers Junior High School
WAPPINGERS CENTRAL SCHOOL DISTRICT

School Year 2019 - 2020

Dear Parents/Guardians and Students:

In order to ensure an efficient and effective scheduling process, we would like you to be aware of the following calendar:

MARCH
Each student will have the opportunity, either through an individual guidance conference or a small group scheduling session, to select courses, including electives, for the following school year. Changes in selections of electives must be completed by the end of marking period three.

APRIL
Parents will receive this course request list in the mail.

AUGUST
Schedules will be available on the Wappingers website under the parent portal in late August. Concerns about the student’s schedule must be addressed during the summer prior to the first day of school.

The following schedule change requests cannot be accommodated:

- Lunch period changes (unless accompanied by a doctor’s note citing a medical reason)
- Class period changes for the purpose of being with friends
- Change of teacher (unless student has previously failed a course with the assigned teacher)

There may be legitimate exceptions to these procedures, in which case building administration must approve the change in question. We look forward to working together and we encourage you to actively participate in your child’s course selection process.

Sincerely,

David Kedzielewski
Principal
John Jay High School

David Seipp
Principal
Roy C. Ketcham High School
**TABLE OF CONTENTS***

*Please Note: This entire WCSD Course Handbook may be viewed on-line at www.wappingersschools.org/course_handbook

The Curriculum Information & Textbook Resources may be viewed on-line at:

www.wappingersschools.org/Academics/CurInfo.html

<table>
<thead>
<tr>
<th>Telephone Directory</th>
<th>Page 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Pathways</td>
<td>3</td>
</tr>
<tr>
<td>Alternative Courses</td>
<td>14</td>
</tr>
<tr>
<td>Senior Options</td>
<td>16</td>
</tr>
<tr>
<td>Junior Options</td>
<td>16</td>
</tr>
<tr>
<td>Co-Curricular &amp; Extra-Curricular Eligibility</td>
<td>17</td>
</tr>
<tr>
<td>NCAA Eligibility Center Information</td>
<td>18</td>
</tr>
</tbody>
</table>

**COURSE DESCRIPTIONS**

<table>
<thead>
<tr>
<th>Business Education</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>25</td>
</tr>
<tr>
<td>Family and Consumer Sciences</td>
<td>32</td>
</tr>
<tr>
<td>Fine and Performing Arts (Art and Music)</td>
<td>37</td>
</tr>
<tr>
<td>Health</td>
<td>48</td>
</tr>
<tr>
<td>Library Media Center</td>
<td>49</td>
</tr>
<tr>
<td>Mathematics</td>
<td>49</td>
</tr>
<tr>
<td>Physical Education</td>
<td>55</td>
</tr>
<tr>
<td>Science</td>
<td>56</td>
</tr>
<tr>
<td>Second Language</td>
<td>70</td>
</tr>
<tr>
<td>Social Studies</td>
<td>74</td>
</tr>
<tr>
<td>Special Education</td>
<td>81</td>
</tr>
<tr>
<td>Technology Education &amp; Engineering</td>
<td>82</td>
</tr>
<tr>
<td>BOCES Programs and Services</td>
<td>87</td>
</tr>
<tr>
<td>Course Selection Worksheet</td>
<td>89</td>
</tr>
</tbody>
</table>

Cover created by
Bridget McCourt, Grade 12 at RCK
# TELEPHONE DIRECTORY

| John Jay High School                       | 897-6700 | Guidance Staff:  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>David Kedzielawaw</td>
<td>Principal</td>
<td>Stacy Roe-Marshall - Counselor in Charge</td>
</tr>
<tr>
<td>Wilson Castro</td>
<td>Assistant Principal, Grade 9</td>
<td>Karrie Brenner</td>
</tr>
<tr>
<td>Paul Albanese</td>
<td>Assistant Principal, Grade 10</td>
<td>Heather Daley</td>
</tr>
<tr>
<td>Eleanore Riley</td>
<td>Assistant Principal, Grade 11</td>
<td>Jenna Frangione</td>
</tr>
<tr>
<td>Ken Lewis</td>
<td>Assistant Principal, Grade 12</td>
<td>Nicole Kunkel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alicia Loscalzo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Michele Wells</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roy C. Ketcham High School</th>
<th>298-5100</th>
<th>David Townsend - Counselor in Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Seipp</td>
<td>Principal</td>
<td>Kalah Boscia</td>
</tr>
<tr>
<td>Kathleen Schneck</td>
<td>Assistant Principal, Grade 9</td>
<td>Kate DeGroat</td>
</tr>
<tr>
<td>Megan D’Alessandro</td>
<td>Assistant Principal, Grade 10</td>
<td>Suzanne DeSimone</td>
</tr>
<tr>
<td>David Maffei</td>
<td>Assistant Principal, Grade 11</td>
<td>Laura Margini</td>
</tr>
<tr>
<td>Lisa Talaber</td>
<td>Assistant Principal, Grade 12</td>
<td>Antoinette Sarna</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jennifer Soltish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phillip Torettta</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Van Wyck Junior High School</th>
<th>227-1700</th>
<th>Anne Bogen - Counselor in Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steven Shuchat</td>
<td>Principal</td>
<td>Sandra Parker</td>
</tr>
<tr>
<td>Greg VanDeKarr</td>
<td>Assistant Principal, Grade 7</td>
<td>Graceann Smith</td>
</tr>
<tr>
<td>Michael Sienna</td>
<td>Assistant Principal, Grade 8</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wappingers Junior High School</th>
<th>298-5200</th>
<th>Paul Nostrand - Counselor in Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrence Thompson</td>
<td>Principal</td>
<td>Christine Lowery</td>
</tr>
<tr>
<td>Michael Anderson</td>
<td>Assistant Principal, Grade 7</td>
<td></td>
</tr>
<tr>
<td>Michael Corsano</td>
<td>Assistant Principal, Grade 8</td>
<td>Elena Peratikos</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Orchard View Alternative High School</th>
<th>298-5005</th>
<th>Michelle Califano</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laura DiStefano</td>
<td>Principal</td>
<td></td>
</tr>
</tbody>
</table>

## DISTRICT DIRECTORS

- Continuing Education/Driver Education: Jeffrey Behnke, 298-5000...X40137
- Fine & Performing Arts/Foreign Language: Bonnie King, 298-5000...X4121
- Elementary Education: Jessica Turner, 298-5000...X40121
- Social Studies 7-12/English Language Arts 7-12/: Lizzette Ruiz-Giovinazzi, 298-5000...X40156
- Mathematics & Science: Adam Panzer, 298-5000...X40170
- Physical Education, Health, Intramurals and Interscholastic Athletics (Athletic Director): Kurt Jesman, 897-6700...X30096
- RCK & Wappingers JHS Athletics and Family and Consumer Sciences: Joseph Luzzi, 298-5100...X31096
- Special Education Programs: Karen Smith, 298-5000...X40135
- Public Relations and Evaluations and Business Education: Amy Watkins, 298-5000...X40176
- Instructional Technology, Data, Assessment, Library Media Services, and Technology Education: Arthur Schouten, 298-5000...X40180
- Assistant Director/ John Jay HS and Van Wyck JHS Athletics: Maureen Myers, 897-6700...X30097
New Graduation Pathways

The new regulations include a “4+1” option that permits a student to meet graduation assessment requirements by passing Regents examinations in English language arts, math, science, and social studies, plus an additional Regents examination or a comparably rigorous examination approved by the Commissioner.

The 4+1 pathway option does not change existing graduation course or credit requirements and students must continue to meet all current course and 22 units of credit requirements, even if they were to elect to take advantage of the 4+1 option. However, existing regulations provide several areas of flexibility for meeting course and credit requirements through, for example, the availability of integrated CTE courses and independent study.

The 4+1 option applies to students who:
• First entered ninth grade in September 2011 and thereafter OR
• Students who are otherwise eligible to receive a high school diploma in June 2015 and thereafter AND have passed four required Regents exams (or Department-approved alternative assessments) in English, mathematics, science and social studies.

The new regulations create graduation pathways in the Humanities; Science Technology, Engineering and Math (STEM); Biliteracy/Languages Other Than English (LOTE); Career and Technical Education (CTE), and the Arts; students pursuing any of these pathways must pass one of the following assessments in place of the fifth assessment currently required for graduation:

• One additional social studies Regents exam or Department-approved alternative (Humanities Pathway); or
• One additional Regents exam in a different course in mathematics or science or a Department-approved alternative (STEM Pathway); or
• A pathway assessment in a Language Other Than English (LOTE) approved by the Commissioner (which could include a Biliteracy Pathway); or
• A career and technical education pathway assessment approved by the Commissioner, following successful completion of an approved CTE program (CTE Pathway); or
• An arts pathway assessment approved by the Commissioner (Arts Pathway)

A CTE assessment that meets the approved alternative requirements for Science can be substituted for the required Science Regents exam.
The following charts outline the diploma and credential requirements currently in effect. The chart is intended to provide an overview of the requirements and identify the student populations that have access to each type of diploma and non-diploma high school exiting credential. Websites are provided to offer specific regulatory requirements and more detailed information regarding the requirements for each diploma or credential.

<table>
<thead>
<tr>
<th>Diploma Type</th>
<th>Available to</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Regents              | All Student Populations    | • **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives  
• **Assessment:**  
  o 5 required Regents exams with a score of **65 or better** as follows: 1 math, 1 science, 1 social studies, ELA and 1 **Pathway Assessment**; or  
  o 4 required Regents exams with a score of **65 or better** as follows: 1 math, 1 science, 1 social studies, ELA and meet all the requirements of the CDOS Commencement Credential  
| Regents (through appeal) | All Student Populations | • **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives  
• **Assessment:**  
  o 4 required Regents exams with a score of **65 or better** and 1 Regents exam with a score of **60-64** for which an appeal is granted by the local district per Commissioner's Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 social studies, ELA and 1 **Pathway Assessment**; or  
  o 3 required Regents exams with a score of **65 or better** and 1 Regents exam with a score of **60-64** for which an appeal is granted by the local district per Commissioner's Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 social studies, ELA and meet all the requirements of the CDOS Commencement Credential  

Note: Non Regents Pathway exams are not subject to the Appeal Process.
| Regents with Honors | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives  
**Assessment:** 5 required Regents exams and a computed average score of 90 or better as follows: 1 math, 1 science, 1 social studies, ELA and either 1 Pathway Assessment or meet all the requirements of the CDOS Commencement Credential (no more than 2 Department approved alternatives may be substituted and will not count in the computed average)  
http://www.p12.nysed.gov/part100/pages/1005.html#diplomaHonors |
|---|---|---|
| Regents with Advanced Designation | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives. In addition, a student must earn an additional 2 units of credit in LOTE** or a 5 unit sequence in the Arts or CTE. These credits can be included in the 22 required credits.  
**Assessment:** Students may meet the assessment requirements in order to earn a Regents Diploma with Advanced Designation by passing any one of the following combinations of Regents examinations and/or Department approved alternatives if applicable:  
  a. **Traditional Combination:** ELA, Global History and Geography, US History and Government, 3 mathematics, 2 science, 1 must be life science and 1 must be physical science) = 8 Assessments  
  b. **Pathway Combination** (other than STEM): ELA, 1 social studies, 3 mathematics, 2 science (1 must be life science and 1 must be physical science), and either 1 Pathway (other than science or mathematics) or meet the requirements for the CDOS Commencement Credential = 7 or 8 Assessments  
  c. **STEM (Mathematics) Pathway Combination:** ELA, 1 social studies 4 mathematics, 2 science (1 must be life science and 1 must be physical science) = 8 Assessments  
  d. **STEM (Science) Pathway Combination:** ELA, 1 social studies, 3 mathematics, 3 science (1 must be life science and 1 must be physical science) = 8 Assessments  
In addition, a student must pass either a locally developed Checkpoint B LOTE* examination or complete a 5 unit sequence in the Arts or CTE.  
http://www.p12.nysed.gov/part100/pages/1005.html#regentsAD |
| Regents with Advanced Designation with an annotation that denotes Mastery in Math | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives. In addition, a student must earn an additional 2 units of credit in LOTE** or a 5 unit sequence in the Arts or CTE. These credits can be included in the 22 required credits.  
**Assessment:** Meets all assessment requirements for the Regents diploma with advanced designation (see above) and, in addition, scores 85 or better on each of 3 Regents examinations in mathematics  
See 100.5(b)(7)(x)  
http://www.p12.nysed.gov/part100/pages/1005.html#regentsAD |
| Regents with Advanced Designation with an annotation that denotes Mastery in Science | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives. In addition, a student must earn an additional 2 units of credit in LOTE** or a 5 unit sequence in the Arts or CTE. These credits can be included in the 22 required credits.  

**Assessment:** Meets all assessment requirements for the Regents diploma with advanced designation (see above) and, in addition, scores 85 or better on each of 3 Regents examinations in science. See 100.5(b)(7)(x)  
| Regents with Advanced Designation with Honors | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives. In addition, a student must earn an additional 2 units of credit in LOTE** or a 5 unit sequence in the Arts or CTE. These credits can be included in the 22 required credits.  

**Assessment:** Meets all assessment requirements for the Regents diploma with advanced designation (see above) with a computed average score of 90 or better (no more than 2 Department approved alternatives may be substituted and will not count in the computed average)  
**Note:** The locally developed Checkpoint B LOTE* examination is not included in the computed average.  
| Local Diploma (through Appeal) | All Student Populations | **Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives.  

**Assessment:**  
- 3 required Regents exams with a score of 65 or better and 2 Regents exams with a score of 60-64 for which an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 Social Studies, ELA, and 1 Pathway Assessment\(^2\); or  
- 2 required Regents exams with a score of 65 or better and 2 Regents exams with a score of 60-64 for which an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 Social Studies, ELA, and meet all the requirements for the CDOS Commencement Credential  
**Note:** Non Regents Pathway exams are not subject to the Appeal process.  
Students with disabilities with an individualized education program (IEP) or if included on the student’s Section 504 Accommodation Plan

**Credit:** 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives.

**Assessment:**

- **Low Pass Safety Net Option:** 5 required Regents exams with a score of **55 or better** as follows: 1 math, 1 science, 1 social studies, ELA and either 1 **Pathway Assessment** or meet all the requirements of the CDOS Commencement Credential


- **Low Pass Safety Net and Appeal:**
  
  I. 3 required Regents exams with a score of 55 or better and 2 Regents exams with a score of 52-54 for which an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 Social Studies, ELA, and 1 **Pathway Assessment**;

  II. 2 required Regents exams with a score of 55 or better and 2 Regents exams with a score of 52-54 for which an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 Social Studies, ELA, and meet all the requirements of the CDOS Commencement Credential

  **Note:** Non Regents Pathway exams are not subject to the Appeal process.

- **Regents Competency Test (RCT) Safety Net Option for students entering grade 9 prior to September 2011:** passing score on corresponding RCT if student does not achieve a score of 55 or higher on the Regents examination


- **Compensatory Safety Net Option:** scores between 45-54 on one or more of the five required Regents exams, other than the English language arts (ELA) or mathematics, but compensates the low score with a score of 65 or higher on another required Regents exam. Note: a score of at least 55 (or an approved appeal of 52-54) must be earned on both the ELA and 1 mathematics exam. A score of 65 or higher on a single examination may not be used to compensate for more than one examination for which a score of 45-54 is earned.

<table>
<thead>
<tr>
<th>Local Diploma (through Superintendent’s Determination) Revised Jan, 2018</th>
<th>Students with disabilities with an IEP Does NOT INCLUDE students with a Section 504 Accommodation Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit:</strong> 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)* 2 physical education, 3 ½ electives.</td>
<td></td>
</tr>
<tr>
<td><strong>Assessment:</strong></td>
<td></td>
</tr>
<tr>
<td>- A superintendent’s determination made upon a parent’s written request, based on review of documentation, as to graduation-level proficiency in the subject area in which the student was not able to demonstrate proficiency of the State’s learning standards through the assessment required for graduation.</td>
<td></td>
</tr>
</tbody>
</table>

To be eligible for the superintendent determination:

1. The student must have a current individualized education program (IEP) and be receiving special education programs and/or related services.
2. The student did not meet the graduation requirements through the low pass (55-64) safety net option or the compensatory option.
3. The student must have earned the required course credits and have passed, in accordance with district policy, all courses required for graduation, including the Regents courses to prepare for the corresponding required Regents examination areas (English Language Arts (ELA), mathematics, social studies and science).
4. The student must have taken and received a minimum score of 55 on both the ELA and Mathematics Regents examinations or a successfully appealed a score between 52 and 54, except that on or after December 12, 2017, a student who was unable to achieve a minimum score of 55 or did not initiate an appeal of a score between 52 and 54 on the English and/or Mathematics Regents examinations may be considered an eligible student for the Superintendent Determination option, provided that the student has completed the requirements for the New York State (NYS) Career Development and Occupational Studies (CDOS) Commencement Credential.
5. There must be evidence that the student participated in all Regents examinations required for graduation but has not passed one or more of these examinations.
6. In a subject area where the student was not able to demonstrate his/her proficiency of the State’s learning standards through the Regents examinations required for graduation (including ELA and/or mathematics if using the CDOS Commencement Credential to meet the eligibility condition(s) in #4), there must be evidence that the student has otherwise demonstrated graduation level proficiency in the subject area(s).
<table>
<thead>
<tr>
<th>Local Diploma, Regents Diploma, Regents Diploma with Advanced Designation (with or without Honors), with a <strong>Career and Technical Education Endorsement</strong></th>
<th>All Student Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit:</strong> Completes all credit requirements as listed above for specific diploma types and successfully completes an approved career and technical education program.</td>
<td><strong>Assessment:</strong> Achieves a passing score on State assessments as listed above for specific diploma types and successfully completes the 3 part technical assessment designated for the particular approved career and technical education program which the student has completed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Local Diploma, English Language Learners Only</th>
<th>English Language Learners Only</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit:</strong> 22 units of credit distributed as follows: 4 ELA, 4 social studies, 3 science, 3 mathematics, ½ health, 1 arts, 1 language other than English (LOTE)*, 2 physical education, 3 ½ electives.</td>
<td><strong>Assessment:</strong></td>
</tr>
<tr>
<td>o 4 required Regents exams with a score of 65 or better and the ELA Regents exam with a score of 55-59 for which an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7); or</td>
<td>o 3 required Regents exams with a score of 65 or better, 1 Regents exam with a score of 60-64, and the ELA Regents exam with a score of 55-59. For both the 60-64 and the 55-59 scores, an appeal is granted by the local district per Commissioner’s Regulation 100.5(d)(7) as follows: 1 Math, 1 Science, 1 Social Studies, ELA, and either 1 Pathway Assessment or meet the requirements of the CDOS Commencement Credential</td>
</tr>
</tbody>
</table>

**Note:** Students who choose the CDOS pathway may still appeal an ELA score of 55-59 and one other Regents exam score of 60-64.  
**Note:** Non Regents Pathway exams are not subject to the Appeal process.  
**Note:** English Language Learners seeking an appeal for a score of 55-59 on the ELA Regents Exam are only eligible for an appeal in this area if they entered the United States in grade 9 or after and were classified as an ELL when they took the test the second time.  
http://www.p12.nysed.gov/part100/pages/1005.html#regpasscore  
http://www.p12.nysed.gov/part100/pages/1005.html#cartechd
### Non-diploma High School Exiting Credentials

<table>
<thead>
<tr>
<th>Credential Type</th>
<th>Available to</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Career Development and Occupational Studies (CDOS)   | All students other than those who are assessed using the NYS Alternate Assessment (NYSSA) | • Completes a career plan; demonstrates attainment of the commencement level Career Development and Occupational Studies (CDOS) learning standards in the area of career exploration and development, integrated learning and universal foundation skills; satisfactorily completes the equivalent of 2 units of study (216 hours) in Career and Technical Education coursework and work-based learning (including at least 54 hours of work-based learning); and has at least 1 completed employability profile; **OR**
|                                                       |                                       | • Student meets criteria for a national work readiness credential**Note:** Credential may be a supplement to a Local or Regents diploma, or, if the student is unable to meet diploma standards, the credential may be awarded as the student’s exiting credential provided the student has attended school for not less than 12 years, excluding Kindergarten. [http://www.p12.nysed.gov/specialed/publications/CDOScredential-memo-613.htm](http://www.p12.nysed.gov/specialed/publications/CDOScredential-memo-613.htm) |
| Commencement Credential                              |                                       |                                                                                                                                              |
| Skills and Achievement Commencement Credential        | Students with severe disabilities that are assessed using the NYS Alternate Assessment (NYSSA) | All students with severe disabilities who attend school for not less than 12 years, excluding Kindergarten exit with this credential which must be accompanied by documentation of the student’s skills and strengths and levels of independence in academic, career development and foundation skills needed for post-school living, learning and working. [http://www.p12.nysed.gov/specialed/publications/SACCmemo.htm](http://www.p12.nysed.gov/specialed/publications/SACCmemo.htm) [http://www.p12.nysed.gov/part100/pages/1006.html](http://www.p12.nysed.gov/part100/pages/1006.html) |
Footnotes:

* Students with a disability may be excused from the LOTE requirement if so indicated on the IEP but must still earn 22 units of credit to graduate.

** Students with a disability who are excused from the LOTE requirement per their IEP need not complete a 5-unit sequence in the Arts or CTE in order to meet the requirements for the Regents Diploma with Advanced Designation.

¹ In all cases students may substitute an assessment from the list of Department Approved Alternative Examinations Acceptable for Meeting Requirements for a Local or Regents Diploma found at http://www.p12.nysed.gov/assessment/hsgen/archive/list.pdf

² Pathway Assessment Options: All students must pass the following 4 required Regents exams or the corresponding Department approved alternative examination found at http://www.p12.nysed.gov/assessment/hsgen/archive/list.pdf: 1 math Regents exam, 1 science Regents exam, 1 social studies Regents exam, and the English language arts Regents exam. In addition all students must choose 1 of the following options:

- Complete all the requirements for the CDOS Commencement Credential found here http://www.p12.nysed.gov/specialed/publications/CDOScredential-memo-613.htm; or
- Pass an additional math Regents exam in a different course or Department Approved Alternative; or
- Pass an additional science Regents exam in a different course or Department Approved Alternative; or
- Pass an additional social studies Regents exam in a different course or Department Approved Alternative; or
- Pass an additional English assessment in a different course selected from the Department Approved Alternative list; or
- Pass an approved CTE Assessment after successfully completing an approved CTE program;
- Pass a Department approved pathway assessment in the Arts⁴
- Pass a Department approved pathway assessment in a Language other than English (LOTE)

The additional assessment must measure a different course than that which was measured by one of the four required exams above, or an approved pathway assessment in the Arts, CTE or LOTE found at http://www.nysed.gov/curriculum-instruction/multiple-pathways/

The Department is working to identify Pathway assessments in LOTE. When those examinations are identified they will be posted at http://www.nysed.gov/curriculum-instruction/multiple-pathways/

³ The low pass (55-64) option for general education students to earn a local diploma has been phased out and students who entered high school in 2008 and thereafter no longer have access to this option. There may still be students in the K-12 system that entered grade 9 in 2007 or earlier and still have access to this option.
Examination Requirements

Regents Diploma for All Students

Regents Diploma via Appeal for All Students

Local Diploma via Appeal for All Students

Local Diploma for Students with a Disability

Local Diploma via Appeal for English Language Learners

Regents Exam or passing score on a Department Approved Alternative

<table>
<thead>
<tr>
<th># of Exams</th>
<th>Passing Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>65</td>
</tr>
</tbody>
</table>

1 Regents exam with a score of 60-64 for which an appeal has been granted by the district and all remaining Regents exams with a score of 65 or above.

1 Regents exam with a score of 60-64 for which an appeal has been granted by the district and all remaining Regents exams with a score of 65 or above.

Either the ELA Regents exam with a score of 55-59 for which an appeal has been granted by the district, and all remaining Regents exams with a score of 65 or above, OR 1 Regents exam with a score of 60-64 and the ELA Regents exam with a score of 55-59 for which an appeal has been granted by the district, and the remaining Regents exams with a score of 65 or above.

Regents Diploma with Advanced Designation

Depending on the pathway a student chooses, the Regents diploma with advanced designation assessment requirements may be met in multiple ways. Students seeking the Regents diploma with advanced designation may choose from the following assessment options:

- **Traditional Combination**: ELA, Global History and Geography, US History and Government, 3 math, 2 science (1 must be life science and 1 must be physical science) = 8 assessments. In addition, the student must choose either 2 additional credits in LOTE and the locally developed Checkpoint B LOTE exam OR a 5 unit sequence in the arts or CTE.

- **Pathway Combination (other than STEM)**: ELA, 1 social studies, 3 math, 2 science (1 must be life science and 1 must be physical science), 1 pathway (other than Science or math) or complete the requirements for the CDOS Commencement Credential = 7 or 8 assessments. In addition, the student must choose either 2 additional credits in LOTE and the locally developed Checkpoint B LOTE exam OR a 5 unit sequence in the arts or CTE.

- **STEM (Mathematics) Pathway Combination**: ELA, 1 social studies, 4 math, 2 science (1 must be life science and 1 must be physical science) = 8 assessments. In addition, the student must choose either 2 additional credits in LOTE and the locally developed Checkpoint B LOTE exam OR a 5 unit sequence in the arts or CTE.

- **STEM (Science) Pathway Combination**: ELA, 1 social studies, 3 math, 3 science (1 must be life science and 1 must be physical science) = 8 assessments. In addition, the student must choose either 2 additional credits in LOTE and the locally developed Checkpoint B LOTE exam OR a 5 unit sequence in the arts or CTE.


^ In the event a student with a disability is unable to attain a passing score on any Regents examination the student may be eligible for a Superintendent Determination of a local diploma. See: [h\p://www.p12.nysed.gov/specialed/gradrequirements/home.html](http://www.p12.nysed.gov/specialed/gradrequirements/home.html)
1.) Pathways:
A student must either:
- Complete all the requirements for the CDOS Commencement Credential found at https://www.p12.nysed.gov/ciai/multiple-pathways/memos/cdos-graduation-pathway-option.html;
- Pass an additional math Regents examination in a different course or Department Approved Alternative; or
- Pass an additional science Regents examination in a different course or Department Approved Alternative; or
- Pass an additional social studies Regents examination in a different course or Department Approved Alternative; or
- Pass an additional English assessment in a different course selected from the Department Approved Alternative list; or
- Pass a Department approved CTE pathway assessment, following successful completion of an approved CTE program; or
- Pass a Department approved pathway assessment in the Arts; or
- Pass a Department approved pathway assessment in a Language other than English (LOTE)

See Multiple Pathways at: http://www.p12.nysed.gov/ciai/multiple-pathways/

2.) Appeals:
Appeals are subject to local district approval. More information on the appeal to graduate with a lower score on a Regents examination can be found at http://www.p12.nysed.gov/ciai/gradreq/Documents/CurrentAppealForm.pdf

3.) Special Endorsements:
Honors:
A student earns a computed average of at least 90 on the Regents examinations applicable to either a Regents diploma or a Regents diploma with advanced designation. No more than 2 Department approved alternatives can be substituted for a Regents examination and the locally developed Checkpoint B LOTE examination is not included in the calculation.

Mastery in Math and/or Science: A student meets all the requirements for a Regents diploma with advanced designation AND earns a score of 85 or better on 3 math Regents examinations and/or 3 science Regents examinations.

Technical Endorsement: A student meets the requirements for either a local diploma, a Regents diploma or a Regents diploma with advanced designation AND successfully completes a Department approved CTE program including the 3 part technical assessment.

4.) Students with disabilities who entered grade 9 prior to September 2011:
Students with disabilities who enter grade 9 prior to the 11-12 school year who fail one or more Regents examinations may take the corresponding Regents Competency Test (RCT) in order to meet the assessment requirements. This option may not be used in conjunction with the Compensatory Safety Net Option.

5.) Languages other than English (LOTE) exempt students:
Students with a disability may be excused from the requirement from the required units of credit in LOTE if so indicated on the IEP but must still earn 22 units of credit to graduate. A LOTE exempt student who seeks a Regents diploma with advanced designation does NOT have to complete the 5 unit sequence in the Arts or CTE in lieu of LOTE in order to meet the assessment requirements for the advanced diploma.

6.) Superintendent Determination of a Local Diploma
Students with a disability who are unable to attain a local diploma through the various safety net provisions may be eligible for a Superintendent Determination of a local diploma under certain conditions. For more information on the Superintendent Determination of a local diploma go to http://www.p12.nysed.gov/specialed/gradrequirements/home.html

7.) Social Studies Requirement for Students entering grade 9 prior to September 2016
All students first entering grade 9 in 1985 and thereafter but prior to September 2016, shall earn four units of credit in social studies. Such requirement shall include: one unit of credit in American history and one half unit of credit in participation in government and one half unit of credit in economics.
WHAT IS ORCHARD VIEW?
Orchard View Alternative High School is a Wappingers Central School District (WCSD) dedicated for students who have not reached their full potential in the traditional high school setting. Our school provides students with a full range of courses required for high school graduation, as well as certain electives. Students enrolled in Orchard View are actively involved in their own education. Their future success in life rests on making good decisions, which is enforced through Orchard View’s positive behavior supports and interventions. Students have the opportunity to take control of their future in a highly structured, supportive environment.

- Grades 9-12.
- Small Teacher to Student Ratio
- School hours: 7:55am – 1:40pm
- Transportation Provided
- Class schedule: eight (8) forty-two (41) minute academic periods.
- There is limited food service and vending machines.

WHO CAN ATTEND?
Students attending Orchard View are in need of a non-traditional setting that is responsive to a diverse range of adolescence issues. Students who attend Orchard View represent a diverse population of learners with various strengths and abilities. Any high school student in the Wappingers Central School District who is interested in attending Orchard View should speak to their current high school counselor to learn about the application process.

SOCIAL/EMOTIONAL LEARNING
All students at Orchard View participate in Empowerment Academy. Through the Academy, students are able to learn various skills that encourage critical thinking, accountability, and team building. Our Faculty serves as advisors to all students and meets regularly throughout the school year.

COMMUNITY SERVICE
Community service is an integral component of the Orchard View student experience. Through service to others, students gain an appreciation for their community while enhancing their own emotional development. In addition, this experience provides the opportunity to foster and develop interpersonal skills, teach responsibility, and build self-confidence. Every student at Orchard View is required to complete 20 hours of community service each school year. While students may choose to participate in service opportunities organized by the faculty of Orchard View, they are also permitted to independently complete the community service requirement.

COUNSELING PROGRAM
Orchard View’s support staff includes a school counselor and a social worker, who work to improve the social/emotional well-being of students in the school setting. The support staff’s role includes, but is not limited to, the following:

- Counsel individual students with needs or concerns relating to academic, behavioral, and social/emotional issues.
- Counsel small groups with needs or concerns relating to academic, behavioral, and social/emotional issues.
- Provide support for families regarding school related problems.
- Provide referrals to appropriate specialists, special programs, or agencies.

ENROLLMENT PROCEDURE
Students who are interested in applying to Orchard View should contact their current school counselor for an application and to learn more about the intake process. Applications that have a completed student and parent/guardian section should be submitted for review by the student’s current school counselor and building administrator. The current school counselor will initiate the intake process with Orchard View Administration and an intake meeting will be scheduled. Applications may be submitted at any time during the school year. Admitted students may start the program at the beginning of either the Fall or Spring Semester.
### ALTERNATIVE COURSES THAT MEET GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>CORE REQUIREMENT</th>
<th>ALTERNATE COURSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art/Music/1 credit</td>
<td>Interior Design &amp; World of Fashion (1 credit)</td>
</tr>
<tr>
<td></td>
<td>SIA/Communication Systems</td>
</tr>
<tr>
<td></td>
<td>Theatre I (1 credit)</td>
</tr>
<tr>
<td></td>
<td>Design &amp; Drawing for Production (1 credit)</td>
</tr>
<tr>
<td>4th credit in English</td>
<td>Corporate Communications (1 credit)</td>
</tr>
<tr>
<td></td>
<td>(must have passed English 11 Regents)</td>
</tr>
<tr>
<td>3rd credit in Mathematics or Science</td>
<td>Financial Math (1 credit) Math only</td>
</tr>
<tr>
<td></td>
<td>Design and Drawing for Production (Math or Science)</td>
</tr>
<tr>
<td></td>
<td>Digital Electronics (Science)</td>
</tr>
<tr>
<td></td>
<td>Principles of Engineering (Science)</td>
</tr>
<tr>
<td></td>
<td>Civil Engineering and Architecture (Science)</td>
</tr>
<tr>
<td>Economics</td>
<td>Business Economics</td>
</tr>
<tr>
<td></td>
<td>College Business Economics DCC 105</td>
</tr>
</tbody>
</table>

It is important to remember that course enrollment and staff availability determine whether or not a course can be offered. Therefore, as you make your preliminary selections, develop reasonable alternatives as well.

---

**TITLE VII & IX OFFICER - EMPLOYEES**

Dr. Dwight Bonk, Deputy Superintendent for Human Resources and Labor Relations  
(845) 298-5000 x40115

**TITLE VII & IX OFFICER - STUDENTS**

Mr. Daren Lolkema, Assistant Superintendent for Compliance and Information Systems  
(845) 298-5000 x40131

Wappingers Central School District  
PO Box 396  
25 Corporate Park Drive  
Hopewell Junction, NY 12533
SENIOR OPTIONS

Articulation agreements have been made with two local colleges so that qualifying seniors can complete their first year of college at the same time they conclude their final year of high school. Talk with your guidance counselor or principal, or with the college contact person if you have questions. Although college tuition/fees and transportation are family responsibilities, the rates are favorable -- and so is the one-year headstart! As another option please also note the "New Visions" pre-college program sponsored by BOCES.

BRIDGE

High school juniors who are judged by their high school and the Marist College admissions committee to have the necessary qualifications to complete the Bridge Year Program successfully are eligible to participate in the program during their senior year. Academic competence and maturity are among the factors that will be considered. All Bridge students will take the English course (AP English Literature) which will be taught at the high school by its own faculty. Approved and supervised by Marist College, it will receive full Marist course credit. Bridge students will come to the Marist campus to complete their academic program with other college students. Bridge students will be allowed to take up to 15 credits plus one laboratory course each semester.

Contact person: Kathryn DiCorcia, Interim Director of Academic Learning Center

DUTCHESS COMMUNITY COLLEGE

53 Pendell Road
Poughkeepsie, New York 12601-1595
(845) 431-8000

Full-time admission is dependent upon high school GPA and passing a qualifying examination taken in the junior year as well as recommendation by the high school and the Dutchess Community College admissions staff. This will allow students to participate in after school activities if they choose. The 30-32 credits earned during the year may be used to fulfill the first year of an Associate degree at DCC, or transferred to other colleges. To receive high school credit they must receive a grade of C or higher. For part-time admission, the qualifying exam in English is needed to enroll in Eng 101.

Contact person: Coleen Trogisch, Associate Dean of Academic Affairs

JUNIOR OPTIONS

ADVANCED PLACEMENT/HONORS PROGRAM

Students enrolled in Advanced Placement courses are encouraged to take the AP exams that are associated with the courses. The transcripts of students who do not take the required AP exams will show the courses as Honors courses, not AP courses.

For purposes of determining class rank only, Advanced Placement grades will be weighted at 1.10 and Honors course grades will be weighted at 1.05.

DIVERSIFIED CO-OP PROGRAM

The Diversified Co-op Program is a general work-based learning program for Seniors not enrolled in other Co-op programs. The program consists of 300 hours of paid, school-related, supervised work-experience, along with a minimum of one period per week of related in-school instruction. The student will receive one unit of elective credit.
The Board of Education has the authority to establish reasonable standards as prerequisites for eligibility for co-curricular and extracurricular activities. These standards apply to entry qualifications as well as to continued participation in such activities. Advisors/Coaches must disseminate a copy of the expected standards of conduct to all students and parents at the start of each school year, and participating students should be individually informed of the application and scope of such standards.

The Board expects any students participating in co-curricular and extracurricular activities to conduct themselves in an exemplary and acceptable manner. Any student who engages in misconduct or other inappropriate behavior will be subject to discipline or denial of the privilege of participating. Eligibility and continued participation in co-curricular and extracurricular activities are a privilege extended to students, as opposed to a right, and the behavioral standards set forth in the Student Handbook, Code of Conduct (policy 5300), or the Interscholastic Eligibility and Participation Booklet apply to all students participating in any co-curricular and/or extracurricular activity. All student participants, including athletes, will be informed that they have the obligation to act in a responsible manner because of the leadership roles they play in the school environment and as a result are expected to adhere to a ban on the consumption/use of alcoholic beverages, drugs (other than those appropriately prescribed), and/or tobacco products on or off campus.

Advisors/Coaches must specify minimum school attendance requirements, and students must attend school and all scheduled classes on the day of an activity for eligibility for co-curricular and extracurricular activities. Limited exceptions to this rule may be made by the Superintendent of Schools or designee, on a case-by-basis. The relationship between a student's grade point average (GPA) and his/her eligibility must be clearly explained to all student participants.

If a student falls below the minimum requirements, a student may regain their eligible status through an appeals process or through meeting the requirements on the next marking period report card. Students declared ineligible are not permitted to participate in practices, tryouts or rehearsals until they regain eligibility status or until an appeal has been granted. "Training rules" are generally accepted as a condition of participation in student athletics, and may include attendance at practices, individual training programs, etc. Similar rules of rehearsal attendance and practice may apply to other extracurricular or co-curricular activities such as orchestra, band and theater.

Advisors/Coaches will provide these expectations in writing at the beginning of the school year or season, as appropriate. Although suspension from participation in an extracurricular activity does not require a full hearing pursuant to Section 3214 of the Education Law, a student must be given the opportunity to appeal and appear informally before the disciplinarian and/or disciplinary committee, and present his/her side of the story as part of a general discussion of the conduct under review.

Cross-ref: 5300, Code of Conduct
Throughout the course catalog and syllabi courses which meet the NCAA requirements for “core-courses” are designated with this symbol:

If you, as a student-athlete, aspire to play a sport in college please see your guidance counselor as soon as possible and talk to them about the necessary steps that you need to take. The information provided to you in this course handbook is intended to serve as a guide, more information can also be found at www.eligibilitycenter.org.

FREQUENTLY ASKED QUESTIONS

What is the NCAA Eligibility Center?
The NCAA was setup for students who plan to play Division I or Division II sports during their freshman year of college. All students who plan to play collegiately at the Division I or Division II level must register with the NCAA during their senior year of high school. This registration process certifies that the student has met certain academic and other standards, as required under NCAA guidelines in order to compete and receive athletic-based financial aid.

Why are the NCAA Eligibility Center Requirements Important?
Prior to competing at the Division I or Division II level all students must be approved by the NCAA Eligibility Center. In order to be approved by the NCAA Eligibility Center and deemed eligible for athletic competition, all students must have completed all of the required coursework at the high school level. Requirements for eligibility will vary depending upon whether a student plans to compete at the Division I or the Division II level. The NCAA Eligibility Center requirements are very important in a student’s class scheduling process. All students who play high school sports, AAU, or are a member of any type of travel team should inform his/her guidance counselor during their freshman year in order to ensure they are placed on the appropriate scheduling track.

NCAA ELIGIBILITY CENTER INFORMATION

Throughout the course catalog and syllabi courses which meet the NCAA requirements for “core-courses” are designated with this symbol:

If you, as a student-athlete, aspire to play a sport in college please see your guidance counselor as soon as possible and talk to them about the necessary steps that you need to take. The information provided to you in this course handbook is intended to serve as a guide, more information can also be found at www.eligibilitycenter.org.

FREQUENTLY ASKED QUESTIONS

What is the NCAA Eligibility Center?
The NCAA was setup for students who plan to play Division I or Division II sports during their freshman year of college. All students who plan to play collegiately at the Division I or Division II level must register with the NCAA during their senior year of high school. This registration process certifies that the student has met certain academic and other standards, as required under NCAA guidelines in order to compete and receive athletic-based financial aid.

Why are the NCAA Eligibility Center Requirements Important?
Prior to competing at the Division I or Division II level all students must be approved by the NCAA Eligibility Center. In order to be approved by the NCAA Eligibility Center and deemed eligible for athletic competition, all students must have completed all of the required coursework at the high school level. Requirements for eligibility will vary depending upon whether a student plans to compete at the Division I or the Division II level. The NCAA Eligibility Center requirements are very important in a student’s class scheduling process. All students who play high school sports, AAU, or are a member of any type of travel team should inform his/her guidance counselor during their freshman year in order to ensure they are placed on the appropriate scheduling track.
If you want to play sports at an NCAA Division I or II school, start by registering for a Certification Account with the NCAA Eligibility Center at [eligibilitycenter.org](http://eligibilitycenter.org). If you want to play Division III sports or you aren’t sure where you want to compete, start by creating a Profile Page at [eligibilitycenter.org](http://eligibilitycenter.org).

### ACADEMIC REQUIREMENTS
To play sports at a Division I or II school, you must graduate from high school, complete 16 NCAA-approved core courses, earn a minimum GPA and earn an ACT or SAT score that matches your core-course GPA.

### CORE COURSES
Visit [eligibilitycenter.org/courselist](http://eligibilitycenter.org/courselist) for a full list of your high school’s approved core courses. Complete 16 core courses in the following areas:

#### DIVISION I
Complete 10 NCAA core courses, including seven in English, math or natural/physical science, before your seventh semester.

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>(Algebra I or higher)</td>
<td>4 years</td>
</tr>
<tr>
<td>MATH</td>
<td>(Algebra I or higher)</td>
<td>3 years</td>
</tr>
<tr>
<td>NATURAL/PHYSICAL SCIENCE</td>
<td>(Including one year of lab, if offered)</td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL</td>
<td>(English, math or natural/physical science)</td>
<td>1 year</td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL COURSES</td>
<td>(Any area listed to the left, foreign language or comparative religion/philosophy)</td>
<td>4 years</td>
</tr>
</tbody>
</table>

#### DIVISION II

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>(Algebra I or higher)</td>
<td>3 years</td>
</tr>
<tr>
<td>MATH</td>
<td>(Algebra I or higher)</td>
<td>2 years</td>
</tr>
<tr>
<td>NATURAL/PHYSICAL SCIENCE</td>
<td>(Including one year of lab, if offered)</td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL</td>
<td>(English, math or natural/physical science)</td>
<td>2 years</td>
</tr>
<tr>
<td>SOCIAL SCIENCE</td>
<td></td>
<td>2 years</td>
</tr>
<tr>
<td>ADDITIONAL COURSES</td>
<td>(Any area listed to the left, foreign language or comparative religion/philosophy)</td>
<td>4 years</td>
</tr>
</tbody>
</table>

### GRADE-POINT AVERAGE
The NCAA Eligibility Center calculates your grade-point average (GPA) based on the grades you earn in NCAA-approved core courses.
- DI requires a minimum 2.3 GPA.
- DII requires a minimum 2.2 GPA.

### SLIDING SCALE
Divisions I and II use sliding scales to match test scores and GPAs to determine eligibility. The sliding scale balances your test score with your GPA. If you have a low test score, you need a higher GPA to be eligible. Find more information about sliding scales at [ncaa.org/student-athletes/future/test-scores](http://ncaa.org/student-athletes/future/test-scores).

### TEST SCORES
Take the ACT or SAT as many times as you want before you enroll full time in college, but remember to list the NCAA Eligibility Center (code 9999) as a score recipient whenever you register to take a test. If you take a test more than once, send us all your scores and we will use the best scores from each test section to create your sum score. We accept official scores only from the ACT or SAT, and won’t use scores shown on your high school transcript.
Grade 9
Plan
- Start planning now! Take the right courses and earn the best grades you can.
- Ask your counselor for a list of your high school’s NCAA core courses to make sure you take the right classes. Or, find your high school’s list of NCAA core courses at eligibilitycenter.org/courselist.

Grade 10
Register
- Register for a Certification Account or Profile Page with the NCAA Eligibility Center at eligibilitycenter.org.
- If you fall behind on courses, don’t take shortcuts to catch up. Ask your counselor for help with finding approved courses or programs you can take.

Grade 11
Study
- Check with your counselor to make sure you are on track to graduate on time.
- Take the ACT or SAT, and make sure we get your scores by using code 9999.
- At the end of the year, ask your counselor to upload your official transcript.

Grade 12
Graduate
- Take the ACT or SAT again, if necessary, and make sure we get your scores by using code 9999.
- Request your final amateurism certification after April 1.
- After you graduate, ask your counselor to upload your final official transcript with proof of graduation.

Core Courses
This simple formula will help you meet Divisions I and II core-course requirements.

4 x 4 = 16
+ 4 English courses (one per year)
+ 4 math courses (one per year)
+ 4 science courses (one per year)
+ 4 social science courses (one per year)
= 16 NCAA CORE COURSES

For more information:
ncaa.org/playcollegesports
eligibilitycenter.org

Search Frequently Asked Questions
ncaa.org/studentfaq

Follow us:
@NCAAEC
@playcollegesports

NCAA is a trademark of the National Collegiate Athletic Association.
July 2018
BUSINESS EDUCATION

The purpose of the Business Department is to prepare students for entry-level employment in the business office and marketing occupations, for post-secondary studies in business and to provide all students access to key college and career ready skills utilized in all fields and majors.

The Business Department was awarded CTE (Career and Technical Education) endorsement from New York State in Business. This pathway prepares all students, regardless of major or future career decision, with essential skills in college and career readiness. Students must complete the following 3 ½ credits to earn the CTE endorsement on their diploma.

- ½ credit in Microsoft Office
- ½ credit in Money Management (Formerly Financial Health)
- ½ credit in College and Career Planning
- 1 credit in Business Ownership
- 1 credit in Virtual Enterprise OR Business Co-Op (Work-Based Learning) [For the endorsement, only one credit from either of these courses is required, but both courses can be taken in Junior and Senior Year.]

To enhance participation in the Business Education course work, students are encouraged to join Future Business Leaders of America (FBLA) and the National Business Honors Society.

Please note the following:

- Career and Financial Management is a suggested course for all students, especially students in Business Education.
- Students have the opportunity to earn a technical endorsement on their diploma, a NYS Career and Technical Education (CTE) approved 4 + 1 pathway. This pathway requires the following:
  - 22 credits total
    - Pass the following: English Regents, Math Regents, Science Regents, Social Studies Regents
  - Complete a 3.5 credit sequence inclusive of
    - Microsoft Office
    - Money Management
    - College and Career Planning
    - Business Ownership, and
    - Virtual Enterprise OR Work-Based Learning (Co-Op)
  - Complete the Employability Profile
  - Earn 70% on the Fundamental Business Concepts assessment
- Students who complete a 5-credit Career and Technical Education sequence (Business, Career and Life Sciences and/or Technology), may use this in place of the additional 2 units of Foreign Language and Regents exam for an Advanced Regents diploma.
- Corporate Communications satisfies a 4th English credit after passing the English Regents exam.
- College Business Economics (B655) satisfies the ½ unit of credit requirement in Economics (D655).
- Financial Math satisfies a third year math credit after passing the Algebra examination.
- Business Co-Op Education (Work-Based Learning) is available to students who have taken or are enrolled in a Business course other than Microsoft Office or Word Processing.
- Diversified Co-Op Education (Work Experience) is available to seniors not enrolled in another Co-Op program. This course is specifically designed for students who do not qualify for Business Co-Op for CALS Co-Op (Cornell College of Agriculture and Life Sciences.)
Courses with an asterisk are eligible for the CTE Pathway Endorsement in Business Education. Students choosing this pathway will take Microsoft Office, Money Management, Business Ownership, with the choice between Virtual Enterprise OR Work-Based Learning. With successful completion of these courses, students will take an examination from an approved CTE vendor on the Fundamentals of Business. Passing this exam will earn the student the CTE Endorsement in Business on their High School Diploma.

*COLLEGE AND CAREER PLANNING (FORMERLY CAREER & FINANCIAL MANAGEMENT)
Code: 0700 Half Year (9-12) (1/2 credit) (Rank weight 1.00)
Prerequisite: None

Required course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma
Description: Career and Financial Management is one of our required courses for the CTE pathway. It is designed to give you the big picture about where your life might go in the future. You take personality and interest tests to help you make an informed decision about a good field to pursue. You look at colleges and student funding, and you plan a budget for your first shot at living on your own. You explore the basics of employment law, and consider the differences in working in different types of organizations: the military, government agencies, big business, small business, entrepreneurial endeavors and union shops. You consider the management styles you are most likely to encounter in different working environments. Finally, you set personal, professional, and financial goals for your 60 year-old self.

*MICROSOFT OFFICE
Code: B545 Half Year (9-12) (1/2 credit) (Rank weight 1.00)
Prerequisite: None

Required course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma
Description: This ½ credit course will take you beyond the learning that you received at the K-8 level. You will begin the semester learning appropriate keyboarding skills before transitioning to the skills that will help you manage your own documents or a small office efficiently and effectively. After learning to overcome annoying issues in formatting Word documents like ruler tabs, numbered lists, page numbers, and tables, you will learn to set up business cards and do a mail merge. You will learn the basics of spreadsheet software including sorting, formulas, conditional formats, and graphing. You will do projects that integrate all of these products with each other and display the information in PowerPoint.

*MONEY MANAGEMENT (FORMERLY FINANCIAL HEALTH)
Code: B650 Half Year (10-12) (1/2 Credit) (Rank Weight 1.00)
Prerequisite: None

Required course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma
Description: Every adult should have a basic grasp of finances! As you prepare to navigate through life and manage all of the challenges and opportunities that come your way, this course is a must-have to help prepare you to be an educated consumer. Topics covered will include building an emergency fund, budgeting, goal setting, paying for college, avoiding debt, purchasing insurance, investing and retirement planning, to name just a few. This course is one of the core courses for the CTE pathway.

*BUSINESS OWNERSHIP
Code: B653 Full Year (9-12) (1 credit) (Rank weight 1.00)
Prerequisite: None

Required course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma
Description: Business Ownership is a survey course designed around the idea of running a small business. You get a taste of entrepreneurship through the different business disciplines: economics, marketing and sales, accounting and finance, human resources, contract law, patents and trademarks. You work in teams to develop skills in the use of spreadsheets and graphics software using the computer. In addition, you get coaching in public speaking. In the culminating project, you pitch your ideas for a themed restaurant in a format similar to the hit TV show Shark Tank.

*COLLEGE VIRTUAL ENTERPRISE I AND COLLEGE VIRTUAL ENTERPRISE II
Code: B800/B801 Full Year (11-12) (1 credit) (Rank weight 1.10)
Prerequisite: None (Business Ownership or Accounting is suggested)

Optional course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma (Choose Virtual Enterprise or Work-Based Learning)
Description: College Virtual Enterprise I is not your typical high school class. This college-level course, offered in conjunction with SUNY Farmingdale, offers a unique opportunity that allows students to understand and implement all aspects of a successful business. You will run a virtual business that actually sells products or services to other virtual businesses around the world. You can participate in the areas of Administration, Accounting/Finance, Marketing, Sales/Purchasing, Web Design, and Human Resources. You will participate in competitions, such as business plan, website, human resources, advertising, etc. You and your team determine the nature of your business, its products and services, its management and structure, and learn the daily operations of a business under the guidance of a consultant. Your “employment” in the simulated business will allow you to experience, in a simulated business environment, all facets of being a valuable employee in a firm. Additionally, you as an employee in the simulated firm will earn a virtual ‘salary’ that will be managed through a yearlong exercise in personal finance.

Description: College Virtual Enterprise II is a continuation of College Virtual Enterprise I. In your second year of College Virtual Enterprise you will have the opportunity to put your previously learned skills to use, but by taking on a new role in your firm. Both College Virtual Enterprise courses are part of the core courses for the CTE pathway.
**WORK-BASED LEARNING (BUSINESS CO-OP)**  
*Code: B770 Full Year (11-12) (1 credit) (Rank weight 1.00)*  
*Prerequisite: Successful completion of a previous Business Education Course*  

Optional course for CTE Pathway (Career Technical Education) Endorsement on High School Diploma (Choose Work-Based Learning or Virtual Enterprise)  

Description: Work-Based Learning, also known as Business Co-Op, is one of the core courses for the CTE pathway. Want to work while receiving high school credit? Is exploring a career something that interests you for your possible future vocation? Want to make more informed decisions about your goals in life and what education is necessary to reach those goals? Work-based learning will give you the opportunity to reflect on what you have learned through your business courses, apply it in a real-world setting and see how it affects your thinking about jobs and careers, as well as apply it through real-life work experiences.  

You can take this course as a Junior and Senior to earn up to two credits, too! Students are required to find employment, and submit reflective journals and copies of their pay stubs to the supervisor.

**BUSINESS LAW**  
*Code: B610 Full Year (9-12) (1 Credit) (Rank weight 1.00)*  
*Prerequisite: None*  

Description: Business Law opens the door to the types of situations you will face in your future. Know your rights. What rights do you have in school? Can they really search your locker? What happens when you buy a car? What happens in a courtroom? Whether you are planning a legal career or just have common legal questions, this is the course for you. You will take a trip to the Dutchess County Courthouse to witness real court cases as they unfold. Business Law is a great foundation to other business courses, including Business Ownership, Sports Law, and Entertainment Law.

**SPORTS & ENTERTAINMENT LAW**  
*Code: B625 Half Year (10-12) (1/2 credit) (Rank weight 1.00)*  
*Prerequisite: None*  

Description: Do you like to prove a point? Are you the person who enjoys defending others? Maybe you are a huge sports fan, but do not consider yourself an athlete. Or perhaps you’d prefer to explore how the law impacts the Entertainment industry. No problem! This course will explore how the law impacts sports and entertainment. Find out what power the NCAA has over student-athletes and why players are in a union. Learn why individuals in the movie, television, music, or theater industries need to know about the law. You will study legal cases related to these industries. You will have the opportunity to review areas of law that include contracts, labor law, collective bargaining, discrimination, employment, crimes, constitutional and common law, discrimination, securities, copyright infringement, the right of privacy, libel, slander, defamation, advertising, tax, plus many more. See how you can feed your interest to work in the Sports or Entertainment industry from the legal side.

**COMPUTER GAME DESIGN**  
*Code: B680 Half-Year (9-12) (1/2 credit) (Rank weight 1.00)*  
*Prerequisite: None*  

Plug in your imagination for this ½ credit course in computer gaming. All types of students are encouraged to learn the basics of coding in a social and creative environment. Using drag and drop block code in Scratch, you will work individually and in teams to learn how to use loops, conditionals, variables, and functions to make games. You will even have a chance to use graphic software to design your own playing pieces and take a turn programming your own background music. This course is a great choice for anyone considering a career in Computer Science, Business Information Systems, or any STEM field. Most STEM majors require one or more courses in computer science. Students who have had exposure to coding in high school do significantly better in CS courses in college. By taking this in high school, you get to learn the basics of computational thinking in a low-stakes environment where the learning feels like fun.

**MOBILE APP DEVELOPMENT**  
*Code: B685 Half-Year (9-12) (1/2 credit) (Rank weight 1.00)*  
*Prerequisite: Computer Game Design (or Proficiency on local exam)*  

This is a course for creative people. This ½ credit course is offered in the spring after the prerequisite Computer Game Design. It uses drag and drop blocks to code, but moves from games into business applications. MIT App Inventor offers more sophisticated logic and gives you the chance to use mobile features like GPS, the accelerometer, text messaging, and voice recognition in your apps. This course is a great choice for anyone considering a career in Computer Science, Business Information Systems, or any STEM field. Most STEM majors require one or more courses in computer science. Students who have had exposure to coding in high school do significantly better in CS courses in college. By taking this course in high school, you get to learn the basics of computational thinking in a low-stakes environment where the learning feels like fun. Bring your creativity to make it beautiful, make it sing, make it dance, and maybe even make some money.

**FINANCIAL MATH**  
*Code: B415 Full Year (11-12) (1 credit) (Rank weight 1.00)*  
*Prerequisite: Two Years of Math*  

Description: Does hearing the word math send shivers down your spine? Do you ever wonder how you will use the math taught in class? Your wondering days are over! This class will teach you what you need to know to master the financial challenges you will face after graduation. From calculating the cost of a car loan to determining which credit card gives you the best options, these topics are real-world, every day! Find out how much sales tax you need to pay before you make a purchase. Financial Math is the course that will help build your understanding of the mathematical practices to solve problems found in the real-world including banking, finance, salary and income, payroll, loans, and insurance. For those not interested in taking Algebra 2, this course satisfies the 3rd year of Math required for graduation.
Examine how sports and entertainment fans are demanding a much more engaging and realistically immersive experience than ever before! Why is it important for marketers to address the challenge that younger “millennial” audiences are watching sports and entertainment on new platforms, particularly social networks? Why are marketers allowing fans to have an insider’s view and be closer to the action than ever before?

**DIVERSIFIED WORK-BASED LEARNING (DIVERSIFIED CO-OP)**  
**Code:** B700 Full Year (12) (1 credit) (Rank weight 1.00)  
**Prerequisite:** None

Description: If you are a senior and have not taken a business elective but you are interested in earning credit while working, consider Diversified Work-Based Learning (Diversified Co-Op)! Gain valuable work experience that can launch your career. Not sure what your career plan is after high school? The work experience combined with classroom activities will allow you to connect what you are learning in the classroom to the education and the skills required for success in today’s workplace. You will earn a credit toward graduation too! Students must complete assignments virtually to help prepare them for employment. Students are required to find employment, and submit reflective journals and copies of their pay stubs to the supervisor.

**ETHICS AND DECISION MAKING**  
**Code:** B640 Half-Year (9-12) (1/2 credit) (Rank weight 1.00)  
**Prerequisite:** None

Description: In Ethics and Decision Making, you will journey through this low-stakes chance to practice and develop self-confidence, while examining what you believe and why you believe it. You will actively collaborate and the explore “Ethical Frameworks” of Moral and Social Responsibility in order to promote meaningful change built on honesty, trust, and respect where everyone can realize their potential, and when they do, both they and the community thrive. Through the ethical frameworks and foundational understandings of this course, you will explore and learn about the various components of ethics, corporate citizenship, business ethics and employees, consumers, and the ever-changing challenges of the global business environment.

**AP COMPUTER SCIENCE PRINCIPLES**  
**Code:** B690 Full Year (11-12) (1 credit) (Rank weight 1.10)  
**Prerequisite:** 80 or better in Geometry

Description: AP CS Principles is a college course that provides students with an opportunity to explore the type of work done by many STEM professionals. Students build socially useful mobile apps and work through activities to improve their writing, communication, collaboration, and creativity skills. Computer Science jobs currently comprise up to 60% of all STEM jobs in America, are the fastest growing section of the STEM economy, and are projected to make up 70% of all new STEM work in the next decade. The need for professionals with coding skills can be found in every size business, in every industry, in every state in the union. The need is driven by businesses’ desire to produce mobile apps and leverage near-ubiquitous wireless Internet to build out the Internet of Things (IoT).
The study of English in the Wappingers Central School District focuses directly on the Next Generation Learning Standards for English Language Arts in the following areas:

1. Reading Literature.
2. Reading Informational Text.
3. Writing.
4. Speaking and Listening.
5. Language.

Students must take English every year in high school. All students in New York State must receive a passing grade on the Comprehensive Regents Examination in English in Grade 11.

In grades 9-10, English is a full year course designed to help students meet the learning standards and prepare for the Comprehensive Regents Examination in English. Students are scheduled into either a regular or Honors level class.

The Honors class in grade 11 is the Advanced Placement Course in Language and Composition.

In grade 12, students must take a full year of English, from a selection of courses that include Advanced Placement Literature and Composition, Dutchess Community College Courses, English 12: Humanities in Writing and Literature, English 12: Adventures in Writing and Literature, English 12: Contemporary Identities in Writing and Literature.

Dual enrollment in English 11 and any English 12 course is contingent upon continuously passing both courses. At the end of the first and second marking periods, if the student is found to be failing either course, s/he will be dropped from the higher level course, regardless of which course s/he is passing. The student must be eligible to graduate at the end of the year if both courses are completed successfully.

**HONORS PROGRAM IN ENGLISH LANGUAGE ARTS**

The high school English honors program is an extremely rigorous course of study, designed for students capable of superior thinking, reading and writing skills. These students welcome the challenge and excitement of learning more complex and demanding material. Students are placed in honors sections based on their academic achievement along with a teacher recommendation. Students are expected to maintain an 85 overall average to remain in honors.

The profile of a true honors student is multi-dimensional. The student’s work ethic is demonstrated by timely, consistent, complete, and high quality response to assignments along with consistent, active participation in classroom discussion and presentations.

Successful completion of the honors program in grades 9 and 10 prepares students for the Advanced Placement program, which serves as Honors English in grades 11 and 12. Departmental approval is required for student registration in these courses.
**ENGLISH 9**
Code: E341  Full Year (9) (1 credit)  (rank weight 1.0)
Prerequisite: Pass English 8
See English 9 Honors description

**HONORS ENGLISH 9**
Code: E361  Full Year (9) (1 credit) (rank weight 1.05)
Prerequisite: Completion of ELA 8 Honors with a final average of at least 90% and recommendation of ELA 8 teacher or recommendation of 8th grade teacher with department approval.

NOTE: Honors classes generally incorporate more reading, writing and discussion and at a higher level; use more challenging text books and other materials; and take a different final exam from the Regents classes.

Areas of Study may Include:
COURSE CONCEPT: The Journey
QUOTATION: “Not every journey takes place on the road.”
ESSENTIAL QUESTION: How is a physical journey a metaphor for life?

LITERATURE:
• Selections from Elements of Literature (Course 3)
• A Long Way Gone
• Poe Collection
• The Miracle Worker or Monster
• Mythology and Folklore
• The Odyssey
• Romeo and Juliet
• The Book Thief (Honors)
• Grendel (Honors)
• Speak
• The House on Mango Street
• Bad Boy
• Out from Boneville
• The Outsiders
• The Martian Chronicles
• Various essays, poetry and short stories

CONTENT, SKILLS, AND TASKS ADDRESSED:
• Critical Lens
• Journal and journal responses
• Analytical Essay
• Persuasive Essay
• Personal Narrative
• Creative Writing
• Research Project
• Independent Reading Assignments
• Listening activities and exercises
• Oral Presentations
• Literary Terms and Devices
• Vocabulary & spelling study
• Grammar
• Literature Circles/Socratic Seminar

6 TRAIT WRITING
Assessment: A departmental final exam based on the content, concepts and themes in the course will be administered in June. This final will count as 20% of the students’ overall grade.

**ENGLISH 9 LITERACY LAB**
Code: E386  Full Year (9) (½ credit, class meets every other day)  (rank weight 1.0)
Prerequisite: Students assigned based on Grade 8 ELA State Exam Score and Grade 8 ELA class average as well as teacher recommendation.

Course Goal: Provide academic intervention assistance to students who need additional support in ELA skills and strategies in order to meet the New York State Standards in English Language Arts.

Areas of study may include but are not limited to:
• Grammar practice
• Vocabulary development
• Writing process
• Six-Trait writing
• Research skills
• Literary analysis
• Literary terms
• Listening and speaking
• Reading skills and strategies
• Note taking skills
• Testing taking skills
• Critical thinking

Texts: A variety of texts will be used to further develop students’ skills and strategies.

Assessment: Periodic assessment will be given to monitor student progress.

**ENGLISH 10**
Code: E441  Full Year (10) (1 credit) (rank weight 1.0)
Prerequisite: Pass English 9
See Honors English 10 description
For info on the NYS English Language Arts Stds & Core Curriculum see: http://www.corestandards.org/ela-literacy.

**HONORS ENGLISH 10**
Code: E461  Full Year (10) (1 credit) (rank weight 1.05)
Prerequisite: Passed English 9 Honors with a grade of 85% or higher and teacher recommendation or teacher recommendation from Regents level.

NOTE: Honors classes generally incorporate more reading, writing and discussion and at a higher level; use more challenging text books and other materials; and take a different final exam from the Regents classes.

COURSE CONCEPTS: Prejudice and Injustice
ESSENTIAL QUESTION: What makes people unwilling to respond to injustice?
QUOTATION: “The opposite of love is not hate, but indifference.”
GUIDING QUESTION: Why do we repeat our mistakes?

Areas of Study may Include:
CORE LITERATURE:
• Art of Styling Sentences (Honors)
• Night
• Of Mice and Men
• A Raisin in the Sun
• Twelve Night or Taming of the Shrew
• Scarlet Letter (Honors)
• To Kill A Mockingbird
• Selections from The Bedford Reader (Honors)
OPTIONAL TITLES:
- Princess Bride
- Animal Farm
- A Tale of Two Cities (Honors)
- The Good Earth (Honors)
- Nickle and Dimed
- The Bean Trees
- Their Eyes Were Watching God
- Maus

LITERARY SKILLS/QUALITIES, AND TASKS: 6 TRAIT WRITING
- Poetry
- Non-Fiction
- Critical lens
- Journal and journal responses
- Analytical Essay
- Literary letter/author letter
- Business letter
- Creative Writing
- Research paper/project
- Genre Essay
- Other literature based essays
- Independent Reading Assignments
- Listening activities and exercises
- Oral presentations
- Literary terms and devices
- Vocabulary and spelling study
- Grammar

Assessment: A departmental final exam based on the content, concepts and themes in the course will be administered in June. This final will count as 20% of the students' overall grade.

ENGLISH 11 REGENTS
Code: E540 Full Year (11) (1 credit) (rank weight 1.0)
Prerequisite: Passed English 10 or English 10 Honors
COURSE CONCEPTS:
- Loss of innocence
- Rite of passage
- Self-identity

ESSENTIAL QUESTION:
- What does it mean to lose one's innocence?

GUIDING QUESTION:
- Why are values necessary in developing an identity and sense of self?

Areas of Study may Include:

CORE LITERATURE:
- Oedipus Rex
- Catcher in the Rye
- Old Man and the Sea
- Macbeth
- Poems, short stories and essays

OPTIONAL LITERATURE:
- The Great Gatsby
- A Separate Peace
- The Crucible
- A Streetcar Named Desire
- The Glass Menagerie
- Our Town
- Ethan Frome
- The Secret Life of Bees

LITERARY SKILLS/QUALITIES, AND TASKS: 6 TRAIT WRITING
- Writing essays to communicate ideas
- Research paper techniques
- Avoidance of plagiarism
- Written responses to literature, including literary analysis
- Writing a persuasive essay
- Writing a comparison/contrast essay
- Listening to follow directions
- Listening for information
- Listening to evaluate
- Reading strategies to increase comprehension
- Critical reading skills
- Critical thinking skills
- Independent Reading
- Vocabulary and spelling study
- Grammar and usage
- Oral presentations
- MLA documentation
- Preparation for the Comprehensive English Regents Exam
- Literature Circles

LITERACY PORTFOLIO: All students are expected to keep a literacy portfolio
Final Exam is Comprehensive Regents Exam = 100% of final exam grade.

ADVANCED PLACEMENT - LANGUAGE AND COMPOSITION - HONORS
Code: E563 Full Year (11) (1 credit) (rank weight 1.10) (1.05 Honors)
Prerequisite: Completion of Honors English 10 with high marks or teacher recommendation. Students are accepted only by departmental selection and approval.
COURSE CONCEPTS:
- Loss of innocence
- Rite of passage
- Self-identity

ESSENTIAL QUESTION:
- What does it mean to lose one's innocence?

GUIDING QUESTION:
- Why are values necessary in developing an identity and sense of self?

Areas of Study Include:

LITERARY WORKS:
FULL LENGTH WORKS (may include, but not limited to):
- Catcher in the Rye
- Ethan Frome
- A Separate Peace
- A Streetcar Named Desire
- Narrative of the Life of Frederick Douglass
- The Bell Jar
- Our Town
- The Crucible
- The Glass Menagerie
- Beloved
- The Adventures of Huckleberry Finn
- The Great Gatsby
- Macbeth
- Oedipus Rex
- The Writing Life

ADDITIONAL TEXTS (may include, but not limited to):
- Advanced Placement Writing I (The Center for Learning)
- Everything's an Argument with Readings (Bedford)
- The Everyday Writer
- The Language of Composition (Bedford/St. Martin's)
- The Art of Styling Sentences (Barrons)

OBJECTIVES: By the end of the course, students should be able to:
- analyze and interpret samples of good writing, identifying and explaining an author's use of rhetorical strategies and techniques;
- apply effective strategies and techniques in their own writing;
- create and sustain arguments based on readings, research, and/or personal experience;
ENGLISH

• demonstrate understanding and mastery of standard written English as well as stylistic maturity in their own writing;
• write in a variety of genres and contexts, both formal and informal, employing appropriate conventions;
• produce expository and argumentative compositions that introduce a complex central idea and develop it with appropriate, specific evidence, cogent explanations, and clear transitions; and
• move effectively through the stages of the writing process, with careful attention to inquiry and research, drafting, revising, editing, and review.

(adapted from Professional Development for AP English Language and Composition, 2005)

Assessments (may include, but not limited to):
• Rhetorical Analysis (fiction, non-fiction)
• Oral Presentations
• Argument Analysis
• Business Letter
• Synthesis Essay
• Thesis Paper
• Regents Exam Essays
• Creative Writing
• Research Paper/Project
• Book Review
• In-class Timed Essays
• College Board AP English Language and Composition Examination – May

Final Exam: NYS Comprehensive Regents Examination in January counts as 100% of final exam grade.

NOTE: This course, equivalent to a first year college course, is designed for the exceptional student writer who wishes to accept the challenge of a college-level writing course. Students enrolling in this course are expected to take the Advanced Placement English Language and Composition Test. Those not taking the test will have their transcripts changed to indicate English 11 Honors rather than AP.

SENIOR ENGLISH

All senior level courses will address the New York State ELA standards and literacy competencies at the commencement level. Seniors will particularly focus on narration, description, exposition, argumentation and persuasion, as well as a reinforcement of all research skills, with a particular emphasis on MLA style. There will be a continued emphasis on close textual reading for analytical purposes.

ENGLISH 12 - DUTCHESS COMMUNITY COLLEGE ENGLISH 101/102

Code: E662 Full Year (12) (1 credit) (rank weight 1.10)
Prerequisite: Must have passed English 11 and the English Regents exam with an 85+ average and passed the DCC admissions test. Students must also have the recommendation of their grade 11 English teacher and/or the approval of the Director of English Language Arts.

Areas of Study Include:
• Principles of college writing
• Narrative and expository writing
• Argumentative writing
• Traditional rhetorical modes
• Effective composing, revising and editing strategies
• MLA conventions
• Critical reading skills
• Critical thinking skills
• Using language appropriately and imaginatively
• Literature as writing models

• Critical analysis of literature
• Author’s style, language, and syntax
• Development of analytical writing skills
• Deconstructing literature

TEXTS INCLUDE BUT NOT LIMITED TO:
• A Brief Sundance Reader (Heinle)
• Norton Anthology of Literature (W.W. Norton & Company)
• Hamlet
• The Things They Carried
• Death of a Salesman
• Literature: Reading Fiction, Poetry, Drama, and the Essay (McGraw-Hill)

Assessment: For each semester a research paper and/or written final exam is required by Dutchess Community College.

NOTE: Successful completion of DCC 101/102 with a grade of C or higher will earn students 6 college credits.

ENGLISH 12

Code: E670 Full Year (12) (rank weight: 1.0)
Prerequisite: passed English 11

COURSE CONCEPT: Identity, definition of self, and journey of the human spirit through textual experiences.

ESSENTIAL QUESTION: What can we learn about our own identities through analysis of various forms of literature and nonfiction works?

COURSE DESCRIPTION: This course will explore the identity of self through the concept of journeys, major cultural events/movements, and an author’s ability to tell a story. Literature and nonfiction works will be analyzed to reveal challenges and how the meeting or succumbing to these challenges shapes one’s identity of self. Emphasis will be placed on cultural factors and how the world community influences its individual habitants.

Areas of study include:
• A college/personal career unit essay/project
• Research project
• Plagiarism avoidance
• Public speaking
• Critical thinking, reading, and writing
• Literary and textual analysis
• Rhetorical Modes: Narration, Exposition, Argument and Debate
• Literature Circles
• Modes of Writing
• Poetry

Texts may include:
• Hamlet
• Death of a Salesman
• The Things They Carried (selections)
• Antigone
• Into the Wild
• It's Not About the Bike
• Swimming to Antarctica
• Lord of the Flies
• The Maltese Falcon
• The Hobbit
• One Flew Over the Cuckoo's Nest
• On the Road
• Medea
• 1984
ENGLISH

• Brave New World
• The Inferno
• The Whale Rider
• Dracula
• Various poetry, short stories, essays, articles, etc.

ADVANCED PLACEMENT - LITERATURE & COMPOSITION - HONORS
Code: E681 Full Year (12) (1 credit) (rank weight 1.10) (1.05 Honors)
Prerequisite: Must have successfully completed English 11 or English 11 AP with high marks and excellent writing skills and passed the English Regents. Students are accepted only by departmental selection and approval.

Course Objectives: AP English is a college level English course. Our focus is on close, critical reading of poetry, drama, prose fiction, and expository literature from the sixteenth century to the present, written in English. Critical discussion and writing about these works will center on each writer’s technique, theme, style, and tone. The overarching goal of AP English is to help develop mature habits of critical thinking as an independent reader of and writer about literature.

Areas of Study Include:
LITERATURE:
• Sound and Sense textbook
• Gulliver’s Travels
• Heart of Darkness
• 1984
• Invisible Man
• All Quiet on the Western Front
• Jane Eyre
• Antigone
• Shakespeare: Hamlet, King Lear
• Notes from Underground
• Slaughterhouse Five
• Brave New World
• Waiting for Godot
• Rosecrantz and Guildenstern are Dead
• The Things They Carried
• Death of a Salesman
• Utopia
• Frankenstein
• Moby Dick
• Selected poems
• Essays and articles which enhance the understanding of principal texts
• AP examination and practice material

EVALUATION AND ASSESSMENT:
• Regular writing assignments, projects, analytical discussions
• Oral reports given approximately once or twice each quarter
• Literary Criticism Project
• College Application Essay
• Class participation
• Senior portfolio project
• The AP Examination

Final Exam: The final exam grade will be based on the student reflection and analysis project and will count as 20% of the students average.

NOTE: This course, equivalent in difficulty to a second year college English course, is designed for the exceptional student who wishes to accept the challenge of a college-level literature and writing course.

Students enrolling in this course are expected to take the Advanced Placement English Literature and Composition Test. Those not taking the test will have their transcripts changed to indicate English 12 Honors rather than AP.

SEMESTER ELECTIVE COURSES
These courses do not fulfill the English 12 graduation requirement. The following are semester courses that may be used for elective credit in grades 11 and 12. Based on enrollment and staffing, courses may not be offered.

PUBLIC SPEAKING
Code: E664 Public Speaking Description/ DCC 1/2 year course
Prerequisite: None.

Public Speaking and Presentation challenges students to get over the fear of presentations by simply presenting. If you want to work on your public speaking skills or if you have a fear of public speaking, this is for you. Public speaking is still the number one fear among the American population. Students must be required to write and present their presentations on an ongoing basis. This is a course that will take students out of their comfort zones and challenge them in their presentations.

DCC - Student may obtain college credit upon successfully completing the course requirements.

Course Materials to be used: Excerpts from a variety of Classic and Standard public and private presentations from simple to the sublime. Public Speaking Today by Diane Carlin and James Payne.

SCIENCE FICTION AND POPULAR CULTURE
Code: E731 Half Year (11 or 12) (½ credit) (rank weight: 1.0)
Prerequisites: None

Even the most perfect world man can conceive is flawed. Students will explore the definition and characteristics of such dystopias by reading modern and classic sci-fi, investigating theories and cultural allusions behind the works, and analyzing films in the sci-fi genre. In addition, we will analyze what these pieces say about our current society and the future of the human race.

Areas of study include:
• Dystopian science fiction novels such as: 1984, Fahrenheit 451, Slaughterhouse Five, The Handmaid’s Tale, and Brave New World
• Selected short stories and poems by authors like Richard Brautigan, Isaac Asimov, H.G. Wells, and Kurt Vonnegut
• Nonfiction work selections by authors like Joseph Campbell, Stephen Hawking, and Tom Wolfe
• Films such as Metropolis (1927), Star Wars (1977), Blade Runner (1982) and The Matrix (1999)
• Student generated creative writing inspired by course readings and authors’ styles as well as research in related areas of interest.

Assessment: Students will complete various projects. A final project will count as 20% of the student’s final average in the course.
MONSTERS AND MARVELS IN LITERATURE
Code: E732 Half Year (11 or 12)(1/2 credit) (rank weight: 1.0)
Prerequisites: None

ESSENTIAL QUESTION: What does the study of monsters reveal to us about our inner selves?
Zombies, vampires, werewolves, ghosts, goblins, sea beasts, scientific creations gone awry, urban legends, are some of the categories of monsters that will be examined in this course.
Monsters come in all shapes and sizes; they touch every walk of life. Throughout the ages stories of monsters and marvels have captured the imaginations of writers and readers alike, but where do monsters come from? What purpose do they serve? Why does one culture fear one type of monster and another culture, another type? Are monsters projections of our anxieties? More importantly, what exactly makes a monster?
This class will examine monsters in classic and contemporary literature, culture, film and art from earliest times to Freddie Kruger.

Areas of Study Include:
• Bodily Transformation / Shape Shifters
• Blood (Vampires)
• Evil
• Scientific Creations
• The Gothic
• Medieval Marvels and Monsters
• Childhood Monsters
• Horror Films
• Urban Legends
• Doppelgangers
• Sociopaths
• Ghosts
• Post-Apocalyptic Monsters / Zombies

CORE LITERATURE:
• The Inferno
• Frankenstein
• Sir Gawain and the Green Knight
• The Strange Case of Dr. Jekyll and Mr. Hyde
• Dracula

Assessment: Students will complete various projects. A final project will count as 20% of the student’s final average in the course.

SHAKESPEARE
Code: E733 Half Year (11,12) (½ credit) (rank weight: 1.0)
Prerequisites: none

Areas of Study Include:
• Shakespeare, the man
• The Elizabethan Age
• The plays as performance pieces
• Othello
• King Lear
• The Tempest
• Measure for Measure
• Henry
• The Sonnets

Assessment: Final exam and or research project will count as 20% of the student’s final grade.

NOTE: This course is excellent preparation for college English and as a supplementary course for the AP Literature Exam.

Writers Workshop
Code: E737 Half Year (11,12) (½ credit) (rank weight: 1.0)
Prerequisites: none

This is a course for the student who enjoys writing creatively. A writing journal is required of all students. A critical aspect of this class is reading and discussing all students’ work in a supportive community of writers.

Areas of Study Include:
• Formulating ideas
• Techniques of writing poetry and prose
• Studies of appropriate models
• Drafting and revising
• Preparing for publication

Assessment: Students will complete various projects. A final project will count as 20% of the student’s final average in the course.

MEDIA WRITING & COMMUNICATION
Code: E738 Half Year (11,12) (½ credit) (rank weight: 1.0)
Prerequisites: none

This course will focus on writing for different types of media including television, film and print. Students will be required to master appropriate speaking techniques and writing styles and apply those to the production of television broadcasts, short films, commercials, and news articles. Participation in various production projects that will necessitate out of class involvement will be required. There will also be several readings by leaders in the field of visual and print media.

Areas of Study Include:
• Media theory
• Mass communication
• Media ethics
• Writing for the camera
• Broadcast news
• Journalistic writing

Assessment: Students will complete various projects. A final project will count as 20% of the student’s final average in the course.

ELA SKILLS AND INTERVENTIONS

ENGLISH LANGUAGE ARTS SKILLS I
Code: E640 (10) (½ credit) (full year every other day)
Prerequisite: Must have passed English 9

This course is intended for identified students who need to further develop their literacy skills in order to be successful in their course work. An emphasis will be placed on essential skills and strategies to help students read, write, listen, think, and speak effectively.

Areas of study include but are not limited to:
• Reading, writing, listening and speaking for information
• Reading, writing, listening, and speaking for critical analysis
• Listening and note taking skills
• Evaluation of different literary genres
• Use of standard English for effective communication
• Tools for reading, writing, and thinking
• Test taking strategies
• Writing workshop
• Six-Trait writing

Texts: A variety of texts will be used to further develop students’ skills and strategies.
ENGLISH LANGUAGE ARTS SKILLS II
Code: E740 (11) (½ credit) (full year every other day)
Prerequisite: Must have passed English 10

This course is intended for identified students who need to further develop their literacy skills in order to be successful in their course work and the English Regents exam. An emphasis will be placed on essential skills and strategies to help students read, write, listen, think, and speak effectively.

Areas of Study Include but are not limited to:
- Reading, writing, listening and speaking for information
- Reading, writing, listening and speaking for critical analysis
- Listening and note taking skills
- Evaluation of different literary genres
- Use of standard English for effective communication
- Tools for reading, writing, and thinking
- Test taking strategies
- Writing workshop
- Six-Trait writing

Texts: A variety of texts will be used to further develop students' skills and strategies.

Assessment: Completion of class projects and assignments. Periodic progress monitoring will assess each student's skill development.

LITERATURE OF GENOCIDE
Code: E782 (D782) Half Year (11 or 12) (½ credit) Rank Weight 1.0
Prerequisites: None

This course will deal with the uniqueness and universality of this momentous event in the history of mankind. It will examine the causes as well as the events of the Holocaust. Participants will study its effect on the course of humanity during the five subsequent decades. The class will consist of historical readings, fictional accounts, films and guest speakers. There will be a variety of written assignments as well as a research project.

Areas of Study may Include:
- Understanding of Terminology
- History of Anti-Semitism
- Factors Leading Up to World War II
- Rise of Hitler and Nazism - 1921 - 1933
- Hitler's Dictatorship
- WWII and the Holocaust

Assessment: Students will complete various projects. A final project will count as 20% of the student's final average in the course.

THEATRE COURSES

THEATRE I
Code: E810 Full year (9-12) (1 Credit) (rank weight 1.0)
Prerequisite: None

ESSENTIAL QUESTIONS: Why have human beings throughout the ages produced theatre? What can we discover about ourselves as individuals by producing theatre?

This course is an introduction to theatre arts. It is a participatory course in which students will learn basic stage movement and voice training, introductory acting and improvisational techniques as well as back stage elements such as lighting and costing. It is intended for both the student who has always wanted to try her/his hand at the stage as well as the student who has had a real interest in performing.

Areas of Study Include:
- Forms and purposes of the theatre throughout various stages of history
- Production process
- Performance workshops
- Emergence of the theatre
- The rise of public theatre
- Contemporary theatre

Assessment: Evaluation will be ongoing. It will be based on participation, grades, acting exercises, written projects, reading assignments, final projects and tests

NOTE: This course may be used to meet the 1 unit Regents Art/Music graduation requirement.

THEATRE II
Code: E820 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Must have successfully completed Theatre I or have permission of the instructor.

This course is a continuation of Theatre I for the advanced student.

Areas of Study Include:
PLAY ANALYSIS:
- Active reading of scripts
- Structure
- Given circumstances
- Four Clues to Characterization

THEATRE HISTORY:
- Historical figures in theatre (Checkov, Brecht, Stanislavsky, Shakespeare, etc.)
- Epochs in theatre history

PRODUCTION WORK:
- Set design
- Costume design
- Prop plan
- Lighting and sound
PERFORMANCE:
• Dramatic interpretation
• Working with stage directions
• Technical acting skills
• Students take on the roles of actors and directors

CRITICISM:
• Written critiques of in-class productions
• Written critiques of school plays and professional productions (viewed on DVD)
• Read professional criticism of Broadway plays
• Leadership in the theatre:

Assessment: Evaluation will be ongoing. It will be based on participation grades, acting exercises, written projects, reading assignment, final projects and tests.

THEATRE III
Code: E821 Theatre III - Full year course (1 credit)
Prerequisite is Theatre II
This course is offered to 11th and 12th grade students. This course will provide more opportunities to explore and further develop areas of theater and give students a better understanding of the different work that goes into a performance.

BUILD YOUR DREAM CAREER
Code: E730 Half year (1/2 credit) (rank weight: 1.0)
Prerequisite: NONE Targeted Grade Level: 11-12
This course is designed from the Google’s 20’s Time principle in which students begin building confidence to pursue a career they are passionate about.


FILM AS AN ART: ELEMENTS AND ANALYSIS
Code: E777 Half year (1/2 credit) (rank weight: 1.0)
Prerequisite: NONE Targeted Grade Level: 11-12
This course seeks to empower students to challenge themselves by taking a medium which they are familiar with while using literary techniques to analyze film. The goal is to derive greater meaning from both the films they watch as well as to more fully realize their potential as thoughtful young members of our society. This course will also expose students to new ideas through the medium of film, to evaluate how these films are effective using devices/elements common to the ELA classroom, and to gain a better understanding of the medium in general. The goal is to use film and nonfiction articles as a way to focus upon and assess students’ critical thinking skills.

ENGLISH AS A NEW LANGUAGE
In accordance with NYS Education Department regulations, all new students registering in the Wappingers Central School District are screened for English language proficiency and, if necessary, tested with the Language Assessments Battery-Revised (LAB-R). Students who tested Commanding do not need ENL services. Students who test at the Entering, Emerging, Transitioning, or Expanding are considered Limited English Proficient or English as a New Language (ENL). Students who test at the Entering or the Emerging level are assigned a stand-alone unit of study. All students are assigned to an English Language Course. All students are assigned to an English Language Course.

NOTE: ENL is offered at Roy C. Ketcham only. John Jay students Who require ENL attend Ketcham.

ENTERING
Code: G101-102-103 (9-12) (1 credit) (rank weight 1.0)
Elective credit is awarded upon passing stand-alone unit of study.

EMERGING
Code: G201-202 (9-12) (1 credit) (rank weight 1.0)
Elective credit is awarded upon passing stand-alone unit of study.
Courses offered by this department help to provide all students with skills required for success in daily living and family life. Additionally, for some, the courses, as offered in a sequence, provide the basis for entry into the workplace, and/or further formal training in a selected career pattern.

In all courses, practical/hands-on learning experiences are the basis of instruction, and provide the opportunity for each student to experience success, to learn to work cooperatively with others, and to develop both life and leisure skills.

**SEQUENCE REQUIREMENTS**

3-Unit Sequence Options

**FOOD AND NUTRITION SEQUENCE**

Career and Financial Management

Food Preparation

Plus Choice Of (2 credits):

- International/Regional Foods
- Gourmet Foods
- Nutrition For Fitness/Sport
- Baking & Pastry

**HUMAN DEVELOPMENT SEQUENCE**

Career and Financial Management

Food Preparation

Plus Choice Of (2 credits):

- Adolescent Psychology
- Parenting
- Child Development and Psychology

5-Unit Sequence Options

The 3-Unit sequence above PLUS

Two Units from FAMILY AND CONSUMER SCIENCES, TECHNOLOGY OR BUSINESS EDUCATION

1 Co-op credit may be used in any 5-unit sequence.

**NOTE:** World of Fashion and Interior Design when taken together may be credited toward the 1 unit Art/Music requirement for FAMILY AND CONSUMER SCIENCES sequence students.

These half-year courses may be offered on an every other day basis for a full year to receive ½ credit.
Students will be assessed on a regular basis. Students may be asked to demonstrate the acquisition of skills learned and apply those to real-world situations through the use of:

- Authentic assessments
- Laboratories
- Tests and quizzes
- Projects
- Observations
- Public speaking
- Written reflections
- Portfolios

This course is a vehicle through which the commencement level New York State Learning Standards for Family and Consumer Sciences (Personal Health and Fitness, A Safe and Healthy Environment, and Resource Management) can be attained. It also addresses the New York State Commencement Level Learning Standards for Career and Occupational Studies (Career Development, Integrated Learning, Universal Foundation Skills, Career Majors- Human and Public Services).

Standards delivered in the academic disciplines of Math, Science, Technology, English Language Arts, Social Studies, Languages Other Than English and the Arts are supported by the Adolescent Psychology course as it provides real-world opportunities to apply the key ideas and skills taught in those disciplines.

The Adolescent Psychology course may also be used to fulfill the New York State parenting mandate. Adolescent Psychology content topics align with the National Standards for Family and Consumer Sciences.

For a complete review of the NYS learning standards and complete NYS core curriculum, see:
http://www.emsc.nysed.gov/cte/facse/fccontent.html

COOPERATIVE WORK EXPERIENCE (CO-OP) - CHILD DEVELOPMENT AND PSYCHOLOGY
Code: H694 Full Year (11-12) (1 credit)
Prerequisite: Child Development, Parenting or Adolescent Development

Code: H696 Half Year (11-12) (½ credit)
Prerequisite: Child Development and Psychology, Parenting or Adolescent Psychology

Areas of Study Include:
- At least 300 hours (150 hours for ½ year course) of part-time work experience in a job related to Child Development at a business or institution approved by the FACS department.
- Opportunity to work in a real life job setting which reinforces knowledge and skills learned in related courses.
- Work experience related to the students planned course sequence

NOTE: Working papers and a Social Security card are required. A maximum of 2 credits of work experience may be earned each school year. Only 1 credit of work experience may be applied to the 5-unit sequence for graduation.

This course provides the student an opportunity to apply, in a real world setting, the skills and practices learned in the classroom.

Assessment: Assessment is based on regular meetings with teacher/coordinator both in school and at the job site.

For a complete review of the NYS learning standards and complete NYS core curriculum, see:
http://www.emsc.nysed.gov/cte/facse/fccontent.html

CHILD DEVELOPMENT AND PSYCHOLOGY
Code: H770 Half Year (9-12) (½ credit)
Prerequisite: None

Areas of Study Include:
- Introduction to Child Development and Psychology
- Observing Children
- Child, Family, and Community Connections
- Prenatal Development
- Postnatal Period
- Infancy
- Toddlerhood
- Preschool
- School Age
- Special Challenges for Children

NOTE: Skills are practiced in a variety of laboratory and community situations.
PARENTING
Code: H780 Half Year (9-12) (½ credit)
Prerequisite: None

Areas of Study Include:
• Stages of prenatal development
• Physical, emotional, intellectual and social development of the infant
• Conditions which influence parenting and their implications
• Decision-making
• Relationships
• Skills and nurturing
• Available support systems
• Family

This course focuses on the responsibility of childbearing and the caring for personal health, decision-making and the positive ways to meet the needs of the developing child.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

BAKING & PASTRY
Code: H730 Half Year (10-12) (½ credit)
Prerequisite: Food Preparation

Areas of Study Include:
• Basic techniques of pastry and baking for personal and professional experience.
• Introduction to the baking and pastry major of concentration in the culinary arts.

This course provides the student an opportunity to expand upon basic culinary skills and to move toward more complicated procedures of baking and pastry cuisine. Students will learn about the importance of food appearance, presentation, and specialized equipment.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

COOPERATIVE WORK EXPERIENCE (CO-OP) - FOODS
Code: H494 Full Year (11-12) (1 credit)
Prerequisite: Food Preparation

Code: H496 Half Year (11-12) (½ credit)
Prerequisite: Food Preparation

Areas of Study Include:
• At least 300 hours (150 hours for ½ year course) of part-time work experience in a job related to Foods at a business or institution approved by the FACS department.
• Opportunity to work in a real life job setting which reinforces knowledge and skills learned in related courses.
• Work experience related to the students planned course sequence.

NOTE: Working papers and a Social Security card are required. A maximum of 2 credits of work experience may be earned each school year. Only 1 credit of work experience may be applied to the 5-unit sequence for graduation.

This course provides the student an opportunity to apply, in a real world setting, the skills and practices learned in the classroom.

Assessment: Assessment is based on regular meetings with teacher/coordinator both in school and at the job site.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

FOOD PREPARATION
Code: H587 Half Year (9-12) (½ credit)
Prerequisite: None

Areas of Study Include:
• Menu planning
• Meal management
• Food purchasing
• Food preparation
• Meal service

NOTE: This course includes content required by the State Education Department as an introduction to Family and Consumer Science and is required in all three and five unit sequences. Field trips, guest speakers and practical experience form an integral part of this useful course.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

GOURMET FOODS
Code: H750 Half Year (9-12) (½ credit)
Prerequisite: Food Preparation

Areas of Study Include:
• Principles of food preparation
• Demonstration techniques
• Appetizers through desserts
• Menu selection
• Creative and unique food projects
• Career Options

This course provides the student an opportunity to expand upon basic preparation skills and to move toward more complicated procedures of fine cuisine. Students will learn about the importance of food appearance, presentation, and specialized equipment.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html
INTERNATIONAL & REGIONAL FOODS
Code: H760  Half Year (9-12)  (½ credit)
Prerequisite: Food Preparation

Areas of Study Include:
- Foods and customs of many lands
- Cuisines of foreign lands
- Foods in a cross-cultural perspective
- Use of food equipment and terminology of countries studied

This course will provide the students an opportunity to explore a variety of culture-specific foods, as well as preparation techniques. The course will also create a framework for understanding cultural differences and an appreciation for customs, traditions and differences.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

NUTRITION FOR HEALTH, FITNESS, AND SPORTS
Code: H740  Half Year (10-12)  (½ credit)
Prerequisite: Food Preparation

Areas of Study Includes:
- Scientific principles of nutrition as they relate to:
  - Fitness
  - Health
  - Competitive sports
- Menu planning
- Diet for specialized sport
- Some food preparation skills
- Nutritional pyramid and guidelines
- Lifelong nutrition
- Principles of nutrition/application
- Evaluation of:
  - Weight loss programs
  - “Fast foods”
  - Special diets

This course will help to provide all students with skills required for success in daily living and family life. It provides an in-depth study of human nutrition, as it relates to health, wellness and fitness.

Assessment: Assessment is based on quizzes, exams, lab assignments, daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

INTERNIAL DESIGN
Code: H950  Half Year (9-12)  (½ credit)
Prerequisite: None

Areas of Study include:
- Careers in Interior Design
- Influences on Interior Design
  - External Environment
  - Personal Elements
  - Scope of the Decorating/Designing Plan
- Elements and Principles of Design
- Interior Housing Features
  - The Use of Space
  - Architectural Elements
  - Changing Architectural Elements
- Decorating and Furnishing an Interior
  - Decorating Themes
  - Furniture
  - Selecting a Color Scheme
  - Textiles
- Accessories

This course focuses on the interior design and decoration field, enabling students to assess their abilities to plan an interior which uses the principles of design and is acceptable to a client.

Assessment: Assessment is based on quizzes, exams, assignments, projects daily participation and demonstrated skill.

For a complete review of the NYS learning standards and complete NYS core curriculum, see: http://www.emsc.nysed.gov/cte/facse/fccontent.html

WORLD OF FASHION
Code: H960  Half Year (9-12)  (½ credit)
Prerequisite: None

Areas of Study Include:
- Clothes and Fashion
- The Development of Fashion
- The Industry of Fashion
- Textiles
- Design and Color
- The Consumer
- Wardrobe Planning
- Careers

Students will be assessed on a regular basis. Students may be asked to demonstrate the acquisition of skills learned and apply those to real-world situations through the use of:
- Authentic assessments
- Laboratories
- Tests and quizzes
- Projects
- Observations
- Public speaking
- Written reflections
- Portfolios
PART 100 of the Regulations of the Commissioner of Education requires all students to complete one full credit of art, one full credit of music, or ½ credit of each (art/music) before graduating. Art Workshop and/or Music Workshop are the recommended courses for meeting this basic requirement. One credit can be earned by taking any full year course in art or music (note prerequisites).

For those majoring in art, Studio-In-Art comprehensive foundation courses provide the first of the minimum of three credits required in a sequence. It is strongly recommended that students earn a grade of 75 or better to insure success in next level courses.

Students majoring in music have the following minimum requirements:
1. Participation in a major ensemble for four years.
2. Registering for two music electives over a three year span - one of which must be Music Theory.

Highly recommended but not mandatory:
1. Registering for Applied Music study for a minimum of two years.
2. Instrumentalists make every effort to register for Chorus.
3. The “every day” option be elected in courses that have three day and five day sections.

The creation of musical compositions/art work is an integral component of many art and/or music courses. Student work may be used during courses for instruction, promotion/publicity and/or publication. Ownership and/or copyright will be retained by the student.

SEQUENCES COMBINING ART AND MUSIC COURSES

Three Unit Sequence in Fine Arts
Studio-In-Art (or Studio-In-Art/Ceramics/3-D Design/Photomedia/Communications Systems)
- 1 credit in a Musical Knowledge course (Music Workshop Full Year or Music Theory I)
- 1 credit in Music or Visual Arts

Five Unit Sequence in Fine Arts
Studio-In-Art (or Studio-In-Art/Ceramics/3-D Design/Photomedia/Communications Systems)
- 1 credit in a Musical Knowledge course (Music Workshop Full Year or Music Theory)
- 3 credits in Music or Visual Arts

SEQUENCES IN VISUAL ARTS

Three Unit Sequence in Art Education (Comprehensive Visual Arts)
Studio-In-Art (or Studio-In-Art/Ceramics/3-D Design/Photomedia/Communications Systems)
- 2 credits in Advanced Art, observing prerequisites

Five Unit Sequence in Art Education
Studio-In-Art (or Studio-In-Art/Ceramics/Photomedia/Communications Systems)
- Additional credits in Art courses, observing prerequisites.

SEQUENCES IN MUSIC

Three Unit Sequence in Music Education
- 3 credits with representation in both the areas of Musical Knowledge (full year courses) and Skill Development (see flow chart).

Five Unit Sequence in Music Education
- 5 credits with representation from areas of Musical Knowledge (full year courses) and Skill Development. Both areas represented by a minimum of two units of credit.
FINE AND PERFORMING ARTS

Skill Development Courses:

BAND

CHORUS

STRING ORCHESTRA

SYMPHONY ORCHESTRA

Musical Development Courses:

LEVEL 1
(no pre-requisite course required)

Music Workshop
Music In Our Lives
(Full Credit or 1/2 credit)

LEVEL 2
(Level 1 pre-req. course required)

Music Theory I

Music Theory II
Advanced Placement Music Theory
FINE AND PERFORMING ARTS

STUDIO-IN-ART
Code: F587  Full Year (9-11)  (1 credit)  (rank weight 1.0)
Prerequisite: Recommendation of Art Staff
This course is a full-year foundation course designed to meet the Art/Music graduation requirement. It is the prerequisite for Advanced Art I, Advertising Design, and SIA/Communications Systems.
Areas of Study Include:
- Drawing skills developed as a basis for work in:
  - Painting
  - Printmaking
  - Three-dimensional design
- Perceptual skills development
- Elements & principles of Art and Design
- Career options
- Portfolio development
Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from district assessments and objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook assignments, and the WCSD Portfolio Assessment results.
For the complete NYS Core Curriculum for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

STUDIO-IN-ART/COMMUNICATIONS SYSTEMS
Code: F1000  Full Year (9-12)  (1 credit)  (rank weight 1.0)
Prerequisite: None
NOTE: This foundation course can be used for Technology credit and to meet the Art/Music graduation requirement. Students will spend a year exploring visual and technical concepts as they apply to contemporary communication systems. Students will document all work and maintain a digital portfolio for course assessment. This course is taught collaboratively by the departments of Technology and Fine Arts.
Areas of Study Include:
- Development and role of communication systems
- Digital photography
- Tradition/Computer illustration and printing processes
- Sound and radio applications
- Fiber optics
- News writing and communication graphics
- Digital video applications
- Career options
Assessment: Student evaluation is reflected in the numerical grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in projects, written critical analysis of art work, portfolio, and other assignments.

STUDIO-IN-ART/3-DIMENSIONAL DESIGN
Code: F607  Full Year (9-12)  (1 credit)
F707 Half Year (9-12)  (½ credit)  (rank weight 1.0)
Prerequisite: None
This course is a demanding foundation course designed to meet the Art/Music graduation requirement. Students will develop studio skills, including drawing skills, while creating functional as well as aesthetic art. It is a prerequisite for 3-D Design/Crafts II and Studio-in-Sculpture.
Areas of Study Include:
- An introduction to a wide variety of art experiences through:
  - Design and production of 3-D objects utilizing various materials which may include: metal, plaster, clay, wire, and/or glass
  - Portfolio Development
  - Sketchbooks
  - Career options
Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from district assessments and objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook assignments, and the WCSD Portfolio Assessment results.
For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

STUDIO-IN-ART/CERAMICS
Code: F591  Full Year (9-12)  (1 credit)
F791 Half Year (9-12)  (½ credit)  (rank weight 1.0)
Prerequisite: None
This course is a demanding foundation course designed to meet the Art/Music graduation requirement. The second semester of the Full Year course is spent on developing skills on the potter’s wheel. It is a prerequisite for Ceramics II and Studio-In-Sculpture.
NOTE: Students who take the ½ year class (F791) and wish to continue, must then take F594.
Areas of Study Include:
- An introduction to a wide variety of art experiences including:
  - Ceramic hand building techniques including pinch, coil, slab and sculpture
  - Glazing
  - Development of drawing skills
  - Portfolio Sketchbooks
  - Historic and contemporary ceramic work and traditions
  - Digital Portfolio (as computers are available)
  - Career options
Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from district assessments and objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook assignments, digital portfolio, and the WCSD Portfolio Assessment results.
For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.
STUDIO-IN-ART/PHOTOMEDIA
Code: F635  Full Year (9-12) (1 credit)
F735  Half Year (9-12) (½ credit) (rank weight 1.0)
Prerequisite: None

NOTE: Film students are required to maintain a portfolio of their work. A 35mm camera is needed for this course. Students are also required to purchase film and photography paper.

This course is a demanding foundation course designed to meet the Art/Music graduation requirement. It is a prerequisite for Photography II and Media Arts II.

Areas of Study Include:
- An introduction to a wide variety of art experiences through:
  - Fundamentals of photography
  - Black & White film processing
  - Printing from Black & White negatives
  - Composition exercises using a variety of materials
  - A journal that includes illustrations, resource materials and writing
  - Elements of art and principles of design as applied to photography and computer art
- Portfolio development
- Career options
- Full-year course includes:
  - Computer art
  - Use of light in studio setting for portrait product and still-life photography
  - Multi-media learning experiences
  - Experimental darkroom processes

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from district assessments and objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook assignments, and the WCSD Portfolio Assessment results.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

STUDIO-IN-ART/DESIGNWORKS A
Code: F611  1st Semester (9-12) (½ credit) (rank weight 1.0)
Prerequisite: None

STUDIO-IN-ART/DESIGNWORKS B
Code: F612  2nd Semester (9-12) (½ credit)(rank weight 1.0)

STUDIO-IN-ART/DESIGNWORKS - FULL YEAR
Code: F613  Full Year (9-12) (1 credit) (rank weight 1.0)
Prerequisite: None

NOTE: For students desiring an art sequence, enrollment in Studio-In-Art (F687) is suggested.

This course is the foundation course designed to meet the Art/Music graduation requirement for non-art majors. Art making in a variety of media will be explored, visual learning capacities will be identified and developed, and interdisciplinary connections will be utilized. After the successful completion of DesignWorks, students may elect to advance to a foundation level Studio-In-Art class in Ceramics (F594), Photomedia (F635), 3-D Design (F607).

Areas of Study Include:
- An introduction to a wide variety of art experiences through:
  - Print making
  - Design (2-D, 3-D exercises with art elements)
  - Painting (exploring basic color theory)
  - Drawing (exercises in improving drawing skills)
  - Use of a variety of tools and media
  - Sketchbooks
- Career options
- Full-year course includes:
  - Computer art
  - Use of light in studio setting for portrait product and still-life photography
  - Multi-media learning experiences
  - Experimental darkroom processes

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from district assessments and objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, and sketchbook assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

BROADCAST ARTS
Code: F626  Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Any full year art or music course or with permission of instructor (including 9th grade students)

This course will cover the various facets of video production and sound production, editing, and broadcast journalism. Students produce in school news segments to be aired on “WCSD On The Air” and other venues. It does not satisfy the one credit foundation course graduation requirement; however, it can be applied as an elective credit in a sequence.

Areas of Study Include:
- Audio-video recording methods and techniques
  - Prepare broadcast ready pieces for local airing
  - Record, edit and mix sound
- The art of interviewing
- Internet Production
- Motion Graphics
- Story board design
- Copyright laws and their application
- Portfolio development
- Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.
3-D DESIGN/CRAFTS II
Code: F608 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art/3-D Design, full year

This course is designed to develop in students the advanced techniques and skills of the studio crafts media, while creating functional as well as aesthetic art.

Areas of Study Include:
- Development of advanced skills and techniques in:
  - Design and production of advanced 3-D objects utilizing various materials which may include metal, plaster, clay, wire, and/or glass
  - Portfolio development
  - Sketchbooks
- Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

CERAMICS II
Code: F592 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art/Ceramics, full year

This course is designed to develop in students the advanced techniques and skills of the studio ceramics medium.

Areas of Study Include:
- Development of advanced skills and techniques in:
  - Wheel-throwing of clay
  - Hand-building of clay
  - Glaze technology and application
  - An analysis of various ceramic traditions, historical/cultural
  - Drawing skills
  - Sketchbook
  - Sculpting in clay (with wheel and hand)
  - Portfolio (including a digital portfolio as technology is available)
- Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

PHOTOGRAPHY II
Code: F622 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art/Photomedia, full year with a final average of 80 or higher.

This course is designed to develop in students advanced techniques and skills of photography. Assignments are aimed at enriching the expressive use of the camera and darkroom. A research paper, portfolio, oral report, and critique may be required.

Areas of Study Include:
- Development of advanced skills and techniques in areas such as:
  - Technology (computer, digital camera, software applications)
  - Experimental film (high contrast)
  - Digital and Macro photography
  - Mixed media processes
  - Commercial Photography
  - Studio and environmental portraiture
  - Still life/Advertising photography
- Portfolio development
- Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

STUDIO-IN-SCULPTURE
Code: F594 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art/3-D Design or Studio-in-Art/Ceramics, or permission of the instructor

This course is designed to develop in students the aesthetic and technical experience to understand, create and appreciate sculpture.

Areas of Study Include:
- Development of advanced dexterity, sensitivity and technique to control a variety of media which may include: wood, clay, wire, metal, stone, plaster, and/or recycled materials
- Self-expression in advanced three-dimensional forms
- Development of drawing skills
- Portfolio development
- Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.
MEDIA ARTS II
Code: F615  Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art/Photomedia, full year with a final average of 80 or higher.

NOTE: Availability of equipment, student experience, and interest will determine the area of greatest concentration.

This course is designed to develop in students the advanced techniques and skills of the media arts.

Areas of Study Include:
• Development of advanced skills and techniques in areas such as:
  - Electronic imaging
  - Video production via multiple software applications
  - Creative sound
  - Computer graphics
  - Image transfer techniques
  - Animation (computer, stop-motion, claymation)
  - Portfolio development
  - Career options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see:

ADVANCED ART I – DRAWING AND PAINTING
Code: F596  Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Studio-In-Art, F587

This course is designed to provide continued emphasis in the development of visual observation, critical analysis and problem-solving skills through instruction and exploration of two-dimensional materials and techniques. Students will begin to explore potential topics and themes that will provide direction and work for personal, college and Advanced Placement portfolios. Career and college options will be explored in the context of interdisciplinary potential as well as personal development. This is the third course in the Drawing & Painting sequence and is the prerequisite for Advanced Art II. Students are recommended into this course by their art instructor based on their performance in prior art courses.

Areas of Study Include:
• Advanced painting and drawing
  • Print making
  • Mixed media
  • Perceptual skills development
  • Portfolio development
  • Career and college options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see:

ADVANCED ART II – DRAWING AND PAINTING
Code: F597  Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Advanced Art I, or permission of instructor

This course is designed to develop students’ skills in design and drawing as a foundation for advanced work. Visual problem-solving skills will be developed through the examination and analysis of artists’ work. The combined emphasis on skills and concepts will enable students to begin to develop personal statements in their work. This is the second course in the Drawing & Painting sequence and is the prerequisite for Advanced Art II. Students are recommended into this course by their art instructor based on their performance in prior art courses.

Areas of Study Include:
• Advanced painting and drawing
  • Print making
  • Mixed media
  • Perceptual skills development
  • Portfolio development
  • Career and college options

Assessment: Student evaluation is reflected in the art grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in art work, written critical analysis of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see:
ADVANCED PLACEMENT STUDIO ART
Code: F642  Full Year (10-12) (1 credit) (rank weight 1.10)
Prerequisite: Advanced Art II and permission from instructor

NOTE: The fee set by the College Board is the responsibility of the student.
Advanced Placement Studio Art is a College Board certified course designed
to provide instruction that culminates in a portfolio submission to the AP
College Board for foundation level college credit. The focus of the course is
the development of perceptual, problem-solving, and critical thinking skills
to meet this goal. Observational work in two-dimensional media is required
for this portfolio submission. Students are also required to formulate work
that reflects personal investigation of thematic content and visual strategies
for a concentration portion of their portfolio. This is the final course in the
Drawing & Painting sequence. Students are recommended into this course
by their art instructor based on their performance in prior art courses.

Areas of Study Include:
• Advanced painting
• Printmaking
• Mixed media
• Portfolio development
• Career and college options
• Portfolio construction
• Contemporary themes in art
• Critical analysis of works

Assessment: Student evaluation is reflected in the art grade, a composite
of a student’s participation and achievement in assignments and
assessments. The grade may be derived from objective and subjective
teacher evaluations and observations, including students’ demonstration
of criteria-based skills and techniques in art work, written critical analysis
of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see:

PORTFOLIO DEVELOPMENT
Code: F640  Full Year (11-12) (1 credit) (rank weight 1.0)
Prerequisite: Advanced Art II or permission from instructor

This course is recommended for art majors who are in the process of
completing their art course sequence. They will continue to develop the
advanced skills and techniques initiated in Advanced Art I and II. Portfolios
will be developed that reflect personal ideas and skill in several media.

Areas of Study Include:
• Development and recording of a comprehensive college, entry
  level portfolio
• College/employment application process
• Career options and training opportunities

Assessment: Student evaluation is reflected in the art grade, a composite
of a student’s participation and achievement in assignments and
assessments. The grade may be derived from objective and subjective
teacher evaluations and observations, including students’ demonstration
of criteria-based skills and techniques in art work, written critical analysis
of art work, sketchbook, portfolio, and other assignments.

For the complete NYS Learning Standards for the Arts, see:

ADVANCED PLACEMENT ART HISTORY
Code: F644  Full Year All Days (11-12) (1 credit) (rank weight 1.10)
Prerequisite: None

NOTE: Students may earn college credit based on the results of the AP
exam. The fee set by the College Board is the responsibility of the student.
This course is a chronological study, covering both Eastern and Western
art from Prehistory to the present. There is an emphasis on major artists,
styless, themes, issues, and cultural influences on art.

Areas of Study Include:
• Discussion and writing about art using art vocabulary
• A multi-media review of art movements
• Field trips to local museums to apply art history knowledge
  and observation skills
• Power point research of art periods and artists
• Oral presentations

Assessment: Student evaluation is reflected in the art grade, a composite
of a student’s participation and achievement in assignments and
assessments. The grade may be derived from objective and subjective
teacher evaluations and observations, including oral presentations,
research and other projects, and written critical analysis of art work.

For the complete NYS Learning Standards for the Arts, see:

ADVANCED COURSE OFFERINGS IN VISUAL ARTS
These upper level offerings are for the student who has successfully
completed all courses in the discipline of choice. The following criteria
must also be met:
• Students must maintain a minimum average of 85 for all
  prerequisites
• Students must be able to work independently
• Students must be open to criticism and suggestions
• Students must possess a mature work ethic
• Students will develop goals with the art instructor and work
toward higher levels of creative development through portfolio
creation and public exhibition of their work
• Students must complete all prerequisites
• Students must submit a portfolio
• Students must maintain a minimum average of 85 for all
  prerequisites

For the complete NYS Core Curriculum for the Arts, see:
http://www.emsc.nysed.gov/ciai/arts.html

PHOTOGRAPHY III
(Previously titled Advanced Studies in Photography)
Code: F630  Full Year (11-12) (1 credit) (rank weight 1.0)
Prerequisites: Studio-In-Art/Photomedia, Photography II, with
an average of 80 or higher

MEDIA ARTS III
(Previously titled Advanced Studies in Media Arts)
Code: F631  Full Year (11-12) (1 credit) (rank weight 1.0)
Prerequisites: Studio-In-Art/Photomedia, Media Arts II

CERAMICS III
(Previously titled Advanced Studies in Ceramics)
Code: F632  Full Year (11-12) (1 credit) (rank weight 1.0)
Prerequisites: Studio-In-Art/Ceramics, Ceramics II, with an
average of 80 or higher
3-D DESIGN/CRAFTS III  
(Previously titled Advanced Studies in Three-Dimensional Design)  
Code: F637  Full Year (11-12) (1 credit) (rank weight 1.0)  
Prerequisites: Studio-In-Art/3-D Design, 3-D Design/Crafts II  

SCULPTURE II  
(Previously titled Advanced Studies in Sculpture)  
Code: F638  Full Year (11-12) (1 credit) (rank weight 1.0)  
Prerequisites: Studio-In-Art/3-D Design or Studio-In-Art/ Ceramics, Studio-In-Sculpture  

NINTH GRADE BAND  
Code: N654  Full Year (9) (1 credit) All days (rank weight 1.0)  
Prerequisites: Demonstrated performance ability on one of the traditional band instruments and the successful completion of the instructional sequence of the earlier bands or permission of the instructor.  
NOTE: Members are expected to participate in concerts and rehearsals held after school hours, as well as in in-school rotational lesson classes on their major instrument.  
Areas of Study Include:  
• Skills, habits, and techniques necessary for fine band performance  
• Performances of ensemble music of a variety of styles  
• Knowledge of and an appreciation for various styles of music  
• Performance in many public concerts throughout the year  
• Career options  
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and performance in lesson and ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance, home assignments, and District-wide assessment results.  
For the complete NYS Learning Standards for the Arts, see:  

CONCERT BAND  
Code: N635  Full Year (10-12) (1 credit) All days (rank weight 1.0)  
Prerequisite: Successful completion of Ninth Grade Band or permission of the instructor  
NOTE: Members are expected to participate in concerts and rehearsals held after school hours, as well as in in-school rotational lesson classes on their major instrument.  
Areas of Study Include:  
• Performance of compositions of varied difficulties and styles  
• Skills, habits, and techniques necessary for fine band performance  
• Performance in many public concerts throughout the year  
• Career options  
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and performance in lesson and ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance, home assignments, and District-wide assessment results.  
For the complete NYS Learning Standards for the Arts, see:  

SYMPHONIC BAND (JJ)  
Code: N632  Full Year (10-12) (1 credit) All days (rank weight 1.0)  
Prerequisite: A high degree of proficiency as an instrumentalist.  

WIND ENSEMBLE (RCK)  
Code: N649  Full Year (10-12) (1 credit) All days (rank weight 1.0)  
Prerequisite: A high degree of proficiency as an instrumentalist  
NOTE: Membership is gained by audition or permission of the instructor.  
These groups are in great demand for performance both in school and the community, and members must be willing to give the mandatory extra time. Students are expected to participate in concerts and rehearsals held after school hours, as well as in in-school rotational lesson classes on their major instrument.  
Areas of Study Include:  
• Skills, habits, and techniques necessary for fine band performance  
• Performance of highly challenging compositions of a wide variety of styles  
• Knowledge of and an appreciation for various styles of music  
• Performance in many public concerts throughout the year  
• Career options  
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and performance in lesson and ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance, home assignments, and District-wide assessment results.  
For the complete NYS Learning Standards for the Arts, see:  

ORCHESTRA  
Code: N655 Full Year (9-12) (1 credit) All days  
N656 Full Year (9-12) (½ credit) Every other day (rank weight 1.0)  
Prerequisites: Demonstrated performance ability on one of the traditional orchestral instruments and successful completion of the instructional sequence of the earlier orchestras or permission of the instructor  
NOTE: String Orchestra students should enroll in N655 Full Year. Permission of the instructor is required for N656 (every other day).  
Symphony Orchestra wind and percussion students may enroll in N656 every other day with permission of the instructor. Students are expected to participate in concerts and rehearsals held after school hours, as well as in in-school rotational lesson classes on their major instrument.  
Areas of Study Include:  
• Skills, habits, and techniques necessary for fine orchestra performance  
• Performance of a wide variety of styles of music  
• Knowledge of and an appreciation for various styles of music  
• Performance in many public concerts throughout the year  
• Career options  
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and performance in lesson and ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance, home assignments, and District-wide assessment results.  
For the complete NYS Learning Standards for the Arts, see:  
SELECT ORCHESTRA
Code: N657  Full Year (9-12)  (1 credit) All days
Prerequisites: Demonstrated performance ability on one of the traditional orchestral instruments and successful completion of the instructional sequence of the earlier orchestras or permission of the instructor
NOTE: This elective will allow our developing string players to delve into more challenging literature while providing an aspirational goal for students seeking further musical development. This ensemble can also be the basis for many the competitive performance opportunities available at the high school level.
Areas of Study Include:
- Skills, habits, and techniques necessary for fine orchestra performance
- Performance of a wide variety of styles of music
- Knowledge of and an appreciation for various styles of music
- Performance in many public concerts throughout the year
- Career options
NOTE: Membership is gained by audition or permission of the instructor. Members must be willing to give the mandatory extra time for in-school and community performances. Students are expected to participate in concerts and rehearsals held after school hours, as well as in in-school rotational lesson classes on the major instrument.
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and participation in ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance and home assignments.
For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

MIXED CHORUS
Code: N643  Full Year (9-12)  (1 credit) All days
N646  Full Year (9-12)  (½ credit) Every other day (rank weight 1.0)
Prerequisite: None
NOTE: The every other day option may be selected only with permission of the instructor. Students are expected to participate in concerts and rehearsals held after school hours. Students desiring a singing role in the musical productions are encouraged to be members of the chorus.
Areas of Study Include:
- Skills, habits and techniques necessary for fine choral performance
- Performance of choral music of all styles
- Knowledge of and appreciation for various styles of music
- Performing in many public concerts throughout the year
- Career options
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s achievement and participation in ensemble classes. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance and home assignments.
For the complete NYS Learning Standards for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

MUSIC THEORY I
Code: N651  Full Year (9-12)  (1 credit) (rank weight 1.0)
Prerequisite: Ability to read music (treble clef) or permission of the instructor
NOTE: The full year course can be used in Music or Fine Arts sequences. This course is designed to meet the Art/Music graduation requirement.
Areas of Study Include:
- Aural skills
- Listening exercises
- Sight-singing skills
- Performance exercises
- Written skills through written exercises
- Compositional skills and creative exercises
- Analytical skills and analytical exercises
- Composition
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance and home assignments.
For the complete NYS Core Curriculum for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.

MUSIC THEORY II
Code: N658  Full Year (10-12)  (1 credit) (rank weight 1.0)
Prerequisite: Music Theory I
NOTE: The full year course can be used in Music or Fine Arts sequences.
Areas of Study Include:
- Aural skills
- Listening exercises
- Sight-singing skills
- Performance exercises
- Written skills through written exercises
- Composition
Assessment: Student evaluation is reflected in the music grade, a composite of a student’s participation and achievement in assignments and assessments. The grade may be derived from objective and subjective teacher evaluations and observations, including students’ demonstration of criteria-based skills and techniques in performance and home assignments.
For the complete NYS Core Curriculum for the Arts, see: http://www.p12.nysed.gov/ciai/arts/artstand/home.html.
ADVANCED PLACEMENT MUSIC THEORY
Code: N664 Full Year (10-12) (1 credit) (rank weight 1.10)
Prerequisite: Music Theory I
NOTE: This provides the opportunity for advanced music students to
develop a deeper sense of musical values and the necessary skills for
involved musical expression. The option of AP credit in Music Theory II
(on the recommendation of the instructor) is for the mature, self-directed
student. The fee set by the College Board is the responsibility of the
student. The full year course can be used in Music or Fine Arts sequences.
Areas of Study Include:
• Aural skills
• Listening exercises
• Sight-singing skills
• Performance exercises
• Written skills through written exercises
• Composition
• Melodic and harmonic dictation
• Composition of a bass line for a given melody, implying
appropriate harmony
• Realization of a figured bass
• Realization of a Roman numeral progression
• Analysis of repertoire, including melody, harmony, rhythm,
texture and form
• Sight-singing
Assessment: Student evaluation is reflected in the music grade, a
composite of a student’s participation and achievement in assignments
and assessments. The grade may be derived from objective and
subjective teacher evaluations and observations, including students’
demonstration of criteria-based skills and techniques in performance
and home assignments.
For the complete NYS Learning Standards for the Arts, see:

MUSIC WORKSHOP
Code: N659 Full Year (9-12) (1 credit)
N700 Half Year (9-12) (½ credit) (rank weight 1.0)
Prerequisite: None
NOTE: May be offered every other day, all year. The full year course can
be used in Music or Fine Arts sequences. The half year course is not for
students in a music sequence or for music majors.
This course is designed to meet the Art/Music graduation requirement. It
will offer “hands-on” music-making experiences with various instruments
(as available): computers, keyboards, guitars, dulcimers, percussion
instruments.
Areas of Study Include:
• Composition
• Basic Theory
• Musical styles
• Performance
• Musical Theater
• Music Technology
• Career options

APPLIED MUSIC OR PRIVATE MUSIC STUDY
Code: N627 (9-12) (no credit)
Prerequisite: Two years of private lessons
If a student takes private music lessons in voice, piano, or another musical
instrument acceptable to the department, they are eligible to have this
documented on the high school transcript.
Requirements:
• Candidates for N627 must be regularly registered as high
school students.
• Before being admitted, the student must have completed at
least 2 years in private study. It is highly recommended that
the student have more than 2 years of study.
• The pupil must practice a minimum of 5 hours a week, keeping
a record of such practices on a form provided by the depart-
ment.
• Materials must be of appropriate difficulty, challenging, and be
of acceptable musical value.
• No composition below NYSSMA Manual Grade 3 in difficulty
will be acceptable.
• The student must play for a school examiner at the close of
each semester.
• The approval of the Applied Music instructor and the selection
of the examiner is the responsibility of the Coordinator for Fine
and Performing Arts.
NOTE: It is important that the parent and/or student speak with the
school music teacher in September. The WCSD Fine and Performing
Arts Applied Music application form must be submitted with the required
information and signatures.
For the complete NYS Learning Standards for the Arts, see:

FINE AND PERFORMING ARTS - MUSIC
Please note that membership in any of the performing organizations requires attendance
at concerts and rehearsals that may be held beyond the school day.
HEALTH EDUCATION
Code: J441 1st Semester
      J442 2nd Semester (10-12) (½ credit)
Prerequisite: None

Health Education curriculum empowers the students with the knowledge and skills needed to examine and make health-related decisions. Knowledge in the areas of environmental, social, physical and medical sciences assist students in making responsible and informed decisions regarding healthy behaviors. This course is New York State mandated and the credit is necessary for graduation. Grades 10-12.
LIBRARY MEDIA CENTER

The School Library Media Center is at the core of academic excellence. Librarians collaborate with classroom teachers to interweave thinking and research skills into assignments. They also provide a wide array of materials for students’ informal and recreational needs.

Today’s school libraries are centers of print and non-print resources. Books, media, and electronic references are chosen to supplement and complement curriculum, and stimulate students interests.

It is the library’s responsibility to foster a love of reading and learning while providing equal access to all students to the information they need to be successful in school and in life.

MATHEMATICS

The Department of Mathematics provides all students with courses of study required to meet the State’s standards. Our objective is to develop in each student an understanding of mathematics that lasts a lifetime and grows to meet changing demands.

As an alternative to the Algebra, Geometry, Algebra 2, students may use any of the exams listed below.

### MINIMUM ACCEPTABLE SCORES FOR APPROVED ALTERNATIVES TO REGENTS EXAMINATIONS IN MATHEMATICS

<table>
<thead>
<tr>
<th>ALGEBRA 2 and TRIGONOMETRY</th>
<th>Approved Alternative Examination</th>
<th>Minimum Acceptable Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT II Mathematics Level IIC</td>
<td>510</td>
<td></td>
</tr>
<tr>
<td>SAT II Mathematics Level IC</td>
<td>470</td>
<td></td>
</tr>
</tbody>
</table>

**ALGEBRA**

<table>
<thead>
<tr>
<th>Approved Alternative Examination</th>
<th>Minimum Acceptable Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced International Certificate of Education (AICE) Mathematics Examination</td>
<td>E</td>
</tr>
<tr>
<td>Advanced Placement Calculus AB Examination</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Placement Calculus BC Examination</td>
<td>3</td>
</tr>
<tr>
<td>International Baccalaureate Mathematics Studies Standard Level Examination</td>
<td>4</td>
</tr>
<tr>
<td>International Baccalaureate Mathematics Methods Standard Level Examination</td>
<td>4</td>
</tr>
<tr>
<td>International Baccalaureate Mathematics Higher Level Examination</td>
<td>3</td>
</tr>
<tr>
<td>International General Certificate of Secondary Education (IGCSE)</td>
<td>A</td>
</tr>
<tr>
<td>SAT II Mathematics Level IC</td>
<td>470</td>
</tr>
<tr>
<td>SAT II Mathematics Level IIC</td>
<td>510</td>
</tr>
</tbody>
</table>

A commencement level course in technology education may be used as third unit of credit in mathematics or science but not both.

**CALCULATOR RECOMMENDATIONS**

The TI-83/84 family Graphing Calculator is recommended for all math and statistics classes. Additionally, the TI-89, TI-Titanium or TI-Inspire is recommended for AP Calculus AB and BC, MVC Calculus and Statistics. Calculators are used daily in classroom activities. Parents/students are encouraged to purchase their own calculators so that students will have them available during evening hours, for future College coursework, and during summer and vacation periods.
ALL students must pass the NYS Algebra Regents exam. This exam will be given in June each year following the Algebra course.

*Important Note:* In keeping with the NYS Commissioner of Education’s Part 100.4 regulations, the following criteria will be used to determine accelerated high school credits using the Algebra Honors course and the Algebra Regents examination:

- Students accelerated in grade eight who pass the Algebra H course and pass the NYS Algebra Regents exam in June of their 8th grade year, will receive one high school credit.
- If a student passes the Algebra H course but fails the NYS Algebra Regents exam, no high school credit for grade eight will be awarded.
- Students who fail the Algebra H course will receive no credit regardless of whether they pass or fail the Algebra Regents exam.

ADVANCED REGENTS DIPLOMA

In addition to passing the NYS Algebra Regents exam, students seeking an advanced Regents diploma must pass the NYS Geometry and NYS Algebra 2 exams with at least a 65%.
ALGEBRA I
Code: M351 Full Year (9) (1 credit) (rank weight 1.00)
Prerequisite: Math 8 with a final average of 70% or higher.

This Common Core Regents course focuses on developing algebra concepts and skills through a multiple-representations approach. Major topics include, but are not limited to, identifying and solving linear and exponential models, statistics, operations with polynomials, factoring and solving quadratic functions, and system of equations. This course ends with a New York State Regents Examination. Successful completion of this course and the Algebra I Regents Examination is a New York State graduation requirement.

ALGEBRA I HONORS
Code: M371 Full Year (9) (1 credit) (rank weight 1.05)
Prerequisite: Math 8 with a final average of 90% or higher with teacher recommendation.

This Common Core Regents course focuses on developing algebra concepts and skills through a multiple-representations approach. Major topics include, but are not limited to, identifying and solving linear and exponential models, statistics, operations with polynomials, factoring and solving quadratic functions, and system of equations. Algebra Honors moves at a faster pace, goes into more depth, and covers additional topics compared to the Algebra Regents course. This course ends with a New York State Regents Examination. Successful completion of this course and the Algebra I Regents Examination is a New York State graduation requirement.

ALGEBRA+
Code: M341 & M341L Full Year (9) (1.5 credit) (rank weight 1.00)
Prerequisite: None
Recommendation: For those with less than a 75% average in Math 8.

This Common Core Regents course focuses on developing algebra concepts and skills through a multiple-representations approach. Major topics include, but are not limited to, identifying and solving linear and exponential models, statistics, operations with polynomials, factoring and solving quadratic functions, and system of equations. Algebra+ consists of an additional attached lab period that allows students additional time to explore/discover concepts through labs and hands-on activities. This course ends with a New York State Regents Examination. Successful completion of this course and the Algebra I Regents Examination is a New York State graduation requirement.

ALGEBRA 1A
Code: M331 Full Year (9) (1 credit) (rank weight 1.00)
Prerequisite: None
Recommendation: For those with less than a 70% average in Math 8.

This course is the first year of a two year sequence in Algebra I, focusing on developing algebra concepts and skills through a multiple-representations approach. The slower pacing of the sequence allows for students to develop and master skills needed to be successful in Algebra. Major topics include, but are not limited to, solving linear equations and inequalities, writing and graphing linear functions, systems of equations, exponential functions and sequences. Upon successful completion of this course, students will be enrolled in Algebra 1B. Successful completion of the Algebra 1A/1B sequence satisfies the New York State graduation requirement for Algebra I.

ALGEBRA 1B
Code: M431 Full Year (10) (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra 1A.

This course is the second year of a two year sequence in Algebra I, focusing on developing algebra concepts and skills through a multiple-representations approach. The slower pacing of the sequence allows for students to develop and master skills needed to be successful in Algebra. Major topics include, but are not limited to, polynomials & factoring, quadratic & radical functions, data analysis and displays. This course ends with a New York State Regents Examination. Successful completion of the Algebra 1A/1B sequence and the Algebra I Regents Examination satisfies the New York State graduation requirement for Algebra I.

GEOMETRY
Code: M451 Full Year (10, 11) (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra I and a passing score on the Algebra Regents Exam.

This Common Core Regents course focuses on the properties of geometric figures and geometric relationships. Major topics include, but are not limited to, constructions & transformations, right triangles, circles, trigonometry, geometric measurement & dimensions, and modeling with geometry. Students will be expected to present valid arguments justified by axioms, definitions and theorems. This course ends with a New York State Regents Examination. Successful completion of this course and the Geometry Regents Examination is a requirement for a New York State Regents Diploma with Advanced Designation.

GEOMETRY HONORS
Code: M481 Full Year (9, 10) (1 credit) (rank weight 1.05)
Prerequisite: Successful completion of Algebra I Honors with a final average of 85% or higher, OR Algebra I with a final average of 95% or higher with teacher recommendation.

This Common Core Regents course focuses on the properties of geometric figures and geometric relationships. Major topics include, but are not limited to, constructions & transformations, right triangles, circles, trigonometry, geometric measurement & dimensions, and modeling with geometry. Students will be expected to present valid arguments justified by axioms, definitions and theorems. Geometry Honors moves at a faster pace, goes into more depth, and covers additional topics compared to the Geometry Regents course. This course ends with a New York State Regents Examination. Successful completion of this course and the Geometry Regents Examination is a requirement for a New York State Regents Diploma with Advanced Designation.
GEOMETRY+
Code: M453 & M453L Full Year (10)  (1.5 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra I.
Recommendation: For those with less than a 75% average in Algebra I.

This Common Core Regents course focuses on the properties of geometric figures and geometric relationships. Major topics include, but are not limited to, constructions & transformations, right triangles, circles, trigonometry, geometric measurement & dimensions, and modeling with geometry. Students will be expected to present valid arguments justified by axioms, definitions and theorems. Geometry+ consists of an additional attached lab period that allows students additional time to explore/discover concepts through labs and hands-on activities. This course ends with a New York State Regents Examination. Successful completion of this course and the Geometry Regents Examination is a requirement for a New York State Regents Diploma with Advanced Designation.

MATH LAB FOR ALGEBRA
Code: M350 Full Year (9)  (0.5 credit)

MATH LAB FOR GEOMETRY
Code: M450 Full Year (10)  (0.5 credit)

Students may be assigned to these courses on an every other day basis. The goal of these courses is to use research validated interventions and progress monitoring to improve mathematics skills.

MATH AIS REGENTS PREP

Code: M401 (Fall Semester)  (10-12)  (No Credit)
M402 (Spring Semester)

Academic Intervention Services (AIS) are mandated for all students who have failed the Algebra I Regents Exam. Students will be assigned to the course either 5 days a week or on an every other day basis. The student remains in the course until he/she passes the Algebra I Regents Exam.

ALGEBRA II
Code: M551 Full Year (11, 12)  (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Geometry with a final average of 70% or higher, or Algebra 2N with a final average of 85% or higher with teacher recommendation.

This Common Core Regents course builds a foundation of mathematics for those students going on to Pre-Calculus and/or students who are college bound. Algebra II builds upon topics that were first introduced in Algebra I. Additional topics include, but are not limited to, systems of linear & circle equations, rational expressions, rational, irrational and complex numbers, quadratic equations & functions, sequences & series, relations & functions, exponents & exponential functions, logarithms, and introductory trigonometry. This course ends with a New York State Regents Examination. Successful completion of this course and the Algebra II Regents Examination is a requirement for a New York State Regents Diploma with Advanced Designation.

ALGEBRA II HONORS
Code: M581 Full Year (10, 11)  (1 credit) (rank weight 1.05)
Prerequisite: Successful completion of Geometry Honors with a final average of 85% or higher, OR Geometry with a final average of 90% or higher with teacher recommendation.

This Common Core Regents course builds a foundation of mathematics for those students going on to Pre-Calculus and/or students who are college bound. Algebra II builds upon topics that were first introduced in Algebra I. Additional topics include, but are not limited to, systems of linear & circle equations, rational expressions, rational, irrational and complex numbers, quadratic equations & functions, sequences & series, relations & functions, exponents & exponential functions, logarithms, and introductory trigonometry. Algebra II Honors moves at a faster pace, goes into more depth, and covers additional topics compared to the Algebra II Regents course. This course ends with a New York State Regents Examination. Successful completion of this course and the Algebra II Regents Examination is a requirement for a New York State Regents Diploma with Advanced Designation.

ALGEBRA 2N
Code: M541 Full Year (11, 12)  (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra I.
Recommendation: Geometry with a final average lower than 70%, OR Algebra 1B with a final average lower than 70%. This non-Regents course expands upon students’ prior knowledge of Algebra and explores more advanced Algebra concepts. Major topics include, but are not limited to, the basics of functions, quadratic functions, radicals, complex numbers, rational functions, and introductory trigonometry. This course is designed for students who are not pursuing a New York State Regents Diploma with Advanced Designation.

INTRODUCTION TO COLLEGE MATH
Code: M645 Full Year (12)  (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra 2N.

This course is intended for students who desire a 4th credit in math, but are not seeking a New York State Regents Diploma with Advanced Designation. The first half year focuses on Trigonometry which includes topics such as, right triangle trig, basic trig functions, inverse trig function, graphing trig functions, and trig applications. The second half year focuses on Algebra which includes topics such as factoring, solving quadratics, functions, statistics, and probability.

PRE-CALCULUS
Code: M644 Full Year (11, 12)  (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra II.

This course is intended for students who wish to further their understanding of mathematical structure and analysis. This course is designed to expand on, make connections between, and apply concepts related to major topics that include, but are not limited to, trigonometry, vectors, matrices, analytic geometry, functions & their graphs, polynomial functions, rational functions, exponential functions, logarithms & limits.
Pre-Calculus Honors (DCC MAT 185- 4 Credits)
Code: M661 Full Year (11, 12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Algebra II Honors OR Algebra II with a final average of 95% or higher AND a score of 90% or higher on the New York State Algebra II Regents Examination.
This course is a college level course which follows the curriculum for the Dutchess Community College MAT 185 course. Major topics include, but are not limited to, linear, polynomial, rational, trigonometric, exponential, logarithmic, polar, and inverse functions. Modeling and data analysis techniques are also employed. Conceptual understanding is emphasized and algebraic skills are reinforced throughout the course. Students earn 4 college credits through DCC upon the successful completion of this course.

DCC CALCULUS (DCC MAT 221- 4 CREDITS)
Code: M221 Full Year (12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Pre-Calculus or Pre-Calculus Honors.
This course is a college level course which follows the curriculum for the Dutchess Community College MAT 221 course. Major topics include, but are not limited to, limits, calculating derivatives, curve sketching, motion, optimization, related rates, and integration. Students earn 4 college credits through DCC upon the successful completion of this course.

Advanced Placement Calculus AB- AP Level
Code: M662 Full Year (12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Algebra II with a final average of 95% or higher, OR Pre-Calculus with teacher recommendation.
Note: This course closely follows the Advanced Placement Program of The College Board. The syllabus has been reviewed and approved by the AP audit. Each student is expected to take the Advanced Placement Examination in May. A score of 3, 4, or 5 may result in a student's credit in coursework at many colleges. The exam fee is determined by The College Board and is the responsibility of the student. In the event that a student does not take the AP Exam, the student’s report card and transcript will reflect only a course in high school Honors Calculus at a rank weight of 1.05.
AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. Students will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. Students will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Advanced Placement Calculus BC- AP Level
Code: M681 Full Year (12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Algebra II Honors with a final average of 85% or higher, OR Pre-Calculus Honors, OR AP Calculus AB
Note: This course closely follows the Advanced Placement Program of The College Board. The syllabus has been reviewed and approved by the AP audit. Each student is expected to take the Advanced Placement Examination in May. A score of 3, 4, or 5 may result in a student’s credit in coursework at many colleges. The exam fee is determined by The College Board and is the responsibility of the student. In the event that a student does not take the AP Exam, the student’s report card and transcript will reflect only a course in high school Honors Calculus at a rank weight of 1.05.
AP Calculus BC is considerably more intensive than Advanced Placement Calculus AB. This course is roughly equivalent to both first and second semester college calculus courses. It extends the content learned in AB to different types of equations and introduces the topic of sequences and series. This course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. Students will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections among these representations.

Advanced Placement Statistics- AP Level
Code: M655 Full Year (11-12)(1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Algebra II
Note: This course closely follows the Advanced Placement Program of The College Board. The syllabus has been reviewed and approved by the AP audit. Each student is expected to take the Advanced Placement Examination in May. A score of 3, 4, or 5 may result in a student’s credit in coursework at many colleges. The exam fee is determined by The College Board and is the responsibility of the student. In the event that a student does not take the AP Exam, the student’s report card and transcript will reflect only a course in high school Honors Statistics at a rank weight of 1.05.
AP Statistics focuses on major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will develop analytical and critical thinking skills as they learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences.

Multivariable Calculus & Linear Algebra
Code: M691 Full Year (12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Advanced Placement BC Calculus
This course extends the calculus techniques to two and three dimensions. The linear algebra portion complements the calculus portion by developing methods applicable to discrete as opposed to the continuous systems studied in calculus. It follows a standard college introductory matrix applications based linear algebra course.
MATH & SCIENCE REAL WORLD APPLICATIONS
Code: M692 Full Year (11-12) (1 credit) (rank weight 1.00)
Prerequisite: Successful completion of Algebra I AND Geometry

This course is designed to give students an answer to the question, “When are we going to use this?” by providing students with a hands-on, project-oriented learning experience. Students will explore the math and science behind items they encounter in everyday life in a true STEAM class, using technology and engineering to create some of the objects discussed in class.

COMPUTER PROGRAMMING 1
Code: M415 Half Year (9-12) (0.5 credit) (rank weight 1.00)
Prerequisite: Concurrent enrollment in Algebra I, OR Completion of Algebra I

This course is an introduction to the field of computer science and the fundamentals of computer programming. Students will learn structured, object-oriented event-based programming and will include the development, debugging, and verification of programs. Using the VisualBasic.net language, programming projects are used to reinforce key concepts including data types, decision making structures, loops, procedures and functions. Prior programming experience is not required.

COMPUTER PROGRAMMING 2
Code: M416 Half Year (9-12) (0.5 credit) (rank weight 1.00)
Prerequisite: Successful completion of Computer Programming 1

This course provides additional practice and builds on the core programming concepts taught in Computer Programming 1. Using the VisualBasic.net language, programming projects are used to reinforce advanced programming topics such as class design, arrays, structures, graphics and files.

ADVANCED PLACEMENT COMPUTER SCIENCE A- AP LEVEL
Code: M650 Full Year (11-12) (1 credit) (rank weight 1.10)
Prerequisite: Successful completion of Algebra II, OR Computer Programming 2

Note: This course closely follows the Advanced Placement Program of The College Board. The syllabus has been reviewed and approved by the AP audit. Each student is expected to take the Advanced Placement Examination in May. A score of 3, 4, or 5 may result in a year’s credit in coursework at many colleges. The exam fee is determined by The College Board and is the responsibility of the student. In the event that a student does not take the AP Exam, the student’s report card and transcript will reflect only a course in high school Honors Computer Science at a rank weight of 1.05.

AP Computer Science A focuses on core aspects of computer science which are used to create solutions that are understandable, adaptable, and when appropriate, reusable. The design and implementation of computer programs to solve problems involve skills that are fundamental to the study of computer science. This includes the development and analysis of algorithms and fundamental data structures, and the use of logic and formal methods. The course will cover fundamentals of programming syntax and methodology using the Java programming language.
The goal of the Physical Education program is to provide students with the necessary skills and knowledge to live physically active and healthy lifestyles. All students complete one year of Personal Challenge and Healthy Lifestyles, and two years of Lifetime Physical Education to provide them with the basis for establishment of a lifestyle that includes proven concepts of wellness and fitness. In order to satisfy the graduation requirements as set forth by the New York State Commissioners Regulations, all students must take and pass Physical Education during each semester they are enrolled. There is no medical excuse from Physical Education.

The recommended course of study for Physical Education is:

**PERSONAL CHALLENGE**

Code: P303 Full Year (9th Grade) (½ credit)
Prerequisite: None

Personal Challenge curriculum incorporates classroom concepts while working on issues such as socialization, cooperation, on-task behavior, coping with failure, self-esteem and willingness to try. The goal is to assist each student in the development of the attitudes, skills, and knowledge of movement that will result in a lifetime of participation in physical education.

**HEALTHY LIFESTYLES**

Code: P313 Full Year (10th Grade) (½ credit)
Prerequisite: None

Healthy Lifestyles curriculum incorporates classroom concepts that are related to components of fitness, the human body's anatomy and physiology, body composition, stress management, CPR and much more. The goal is to assist students in the development of knowledge and skills that will result in a lifetime of healthy choices.

**Lifetime Physical Education** - (11-12 Grade, 4 Semester Course- 1/4 credit each semester)

Code: P333 1st Semester (11-12 Grade) (1/4 credit)
P334 2nd Semester (11-12 Grade) (1/4 credit)
Prerequisite: None

Lifetime Physical Education curriculum aims to teach basic skills, enhance knowledge about sports, exercise and other forms of physical activities. The goal of Lifetime Physical Education is to develop immediate and lifelong benefits and enjoyment of regular physical activity. Some areas of study include badminton, volleyball, team handball, archery, recreational games and many more.
Philosophy

The goal of the Science Department is to insure that all students are equipped to the best of their ability not only to survive in an ever changing technologically orientated society, but also to manage their life experiences effectively. With this in mind, we must enable students to develop and utilize the following:

A. Intellectual curiosity and eagerness for life-long learning.
B. A positive self-image as a reasoning human being.
C. Skills of computation and communication.
D. The ability to think and evaluate constructively and creatively.
E. Self-discipline including effective work habits and responsible behavior.
F. Ethical and moral behavior based on respect and appreciation for human values, beliefs and rights of others.
G. Problem solving techniques with understanding and ability to apply the scientific method to problems.
H. Organizing raw data, concepts and theory so that it is manageable and meaningful in solving problems.
I. Ability to understand concepts based on specific data.
J. The use of technological learning tools.

We would recommend and encourage all students to take four years of Science in order to prepare for personal, academic and occupational pursuits.

CORE REQUIREMENT FOR GRADUATION

General Education Regents Diploma Science Requirements

- Advanced Regents Diploma
  - 3 years of science, at least 2 regents courses; one must be Living Environment; another must be a Physical Science (Earth; Chemistry or Physics)
  - 2 regents examinations—passed with 65; one must be Living Environment

- Regents Diploma
  - 3 years of science; one must be Living Environment
  - 1 regents examination passed with a 65
THE PHYSICAL SETTING EARTH SCIENCE

Code: S341 Full Year (10-12) (1 credit) (rank weight 1.0)
Prerequisite: Successful completion of Living Environment

Areas of Study Include:

- Planet Earth
  - Earth Properties & Measurements
  - Scientific notation, density, and rates of change
  - Shape of the Earth
  - Structure of Earth
  - Locating Positions on Earth
  - Latitude/Longitude
  - Drawing isolines, topographic maps, gradient and profiles
  - Terrestrial Navigation – Polaris

- Minerals, Rocks and Resources
  - Define and identify minerals using minerals physical properties
  - Identify and classify rocks
  - Enjoy and utilize rock cycle
  - Recognize renewable and non-renewable resources and understand their use and management

- The Dynamic Crust
  - Locate plate boundaries, earthquake zones, volcanoes and mountain chains
  - Analyze P and S wave arrival time data to locate epicenters and determine origin times
  - Describe the internal structure of the earth
  - Recognize evidences of continental drift, plate tectonics, seafloor spreading, and crustal movement
  - Understand the driving force of plate tectonics, convection
  - Understand the different types of plate boundaries
  - Earthquake and volcano preparedness

- Weathering, Erosion, Deposition and Landscapes
  - Distinguish between two types of weathering, the conditions under which they occur and describe examples of each
  - Factors that affect rate of weathering, deposition and erosion
  - Formation and conservation of soils
  - Difference between transported and residual soils
  - Compare the agents of erosion and their effects on the Earth’s surface
  - NYS erosion history and development of landscape features
  - Glaciers and coastal features
  - Classify NYS landscapes into plains, platforms, plateaus, and mountains

- Interpreting Earth’s History
  - Reconstructing geologic past using principal of uniformitarianism, superposition, correlation, original horizontality, cross cutting relationships, unconformities and fossil evidence
  - Geologic time scale
  - Evolution of life
  - Relative and Absolute dating, use of index fossils
  - Radiometric Dating
  - Origin and change of the atmosphere

- Properties of the Atmosphere
  - Structure of the atmosphere
  - Air pressure and factors that affect it
  - Humidity and factors that affect it
  - Relative humidity and Dew point
  - Wind and factors that affect it
  - Sea breeze and land breeze
  - Jet Stream and Coriolis Effect
  - Formation of clouds and types of precipitation
  - How weather variables are related

- Weather Systems
  - Properties of Water
  - How energy enters the atmosphere
  - Plot and interpret station models
  - Air masses
  - High and low pressure and weather associated with each
  - Identify, explain and forecast major weather systems using weather maps.
  - Compare and contrast severe weather storms: Tornado, Hurricane and thunderstorms
  - Severe weather preparedness

- The Water Cycle and Climates
  - Hydrologic cycle
  - Explain the relationship of porosity, permeability, and capillarity to ground water
  - Factors that affect storage and movement of groundwater
  - Watersheds, how they are used and affected by people
  - How heat energy travels: Conduction, Convection and Radiation
  - Angle, reflection and duration of Insolation and how they affect climate
  - Greenhouse effect
  - Climates and factors that affect climate

- The Earth in Space
  - Motions of celestial objects
  - Heliocentric and Geocentric models
  - Apparent motions of the sun
  - Reason for the seasons
  - Latitude and angle of the sun
  - Duration of daylight

- Beyond Planet Earth
  - Phases of the moon
  - Eclipses of the moon and sun
  - Angular diameter of celestial objects
  - Tides
  - Geometry of orbits
  - Gravitational forces
  - Solar System data
  - Evolution of the universe: red shift and blue shift
  - Asteroids, Meteors, and Comets

- Environmental Awareness
  - Technology’s affects on the environment
  - Pollution
  - Managing resources

Assessment: All Earth Science students who complete the required 1200 minutes of labs will take the two part Physical Setting Earth Science Regents Exam in June.
For the complete NYS Core Curriculum for Physical Setting/Earth Science, see: http://www.emsc.nysed.gov/ciai/pub/earthsci.pdf

HONORS EARTH SCIENCE

Code: S361 Full Year (9) (1 credit) (rank weight 1.05)
Prerequisite: Average of 90 or above in Living Environment and 85 or above in Algebra I

Areas of Study Include:

- The content covered in S341 - The Physical Setting Earth Science
- In addition, the students will submit projects and cover activities that emphasize higher order critical thinking skills

Assessment: All Honors Earth Science students who complete the required 1200 minutes of labs will take the two part Physical Setting Earth Science Regents Exam in June.
For the complete NYS Core Curriculum for Physical Setting Earth Science, see: http://www.emsc.nysed.gov/ciai/pub/earthsci.pdf
LIVING ENVIRONMENT - REGENTS
Code: S441 (S340) Full Year (9,10) (1 credit) (rank weight 1.00)
Prerequisite: Completion of Science 8R and Math 8R

Areas of Study Include:
- Science of Biology
  - What is science? What does Biology study?
  - How does Science work? – The Scientific Method & Experimental Design
  - The Tools of Biology, including the Metric System & Microscopes
- The Chemistry of Life
  - Basic Chemistry
  - Biochemistry
  - Carbohydrates
  - Lipids
  - Nucleic Acids
  - Proteins
  - Enzymes
- Cellular Biology
  - Cell Structure & Function
  - The cell theory
  - Organelles
  - Comparing prokaryotes and eukaryotes
  - Comparing Plant & Animal Cells
  - The plasma membrane & membrane transport: Diffusion/Osmosis/Active Transport
- Photosynthesis
  - Key Idea: Light Energy to Chemical Energy
  - Key Idea: Inorganic carbon (carbon dioxide) to organic carbon (glucose)
  - Occurs in chloroplasts of plant cells (and many single-celled organisms)
- Cellular Respiration
  - Key Idea: Sugars are converted to universal energy molecule, ATP
  - Glucose is converted to inorganic carbon dioxide
  - Aerobic respiration (=36 ATP) is better than anaerobic respiration (= 2 ATP)
  - Occurs in mitochondria of ALL cells, and occurs 24/7
  - Mitochondria are likely descendants of ancient prokaryotes
- Cell Growth & Division
  - Why do Cells Divide? Comparing surface area and volume
  - Mitosis: one diploid cell splits into two identical cells, & mitosis = nuclear division
  - Cancer = mitosis that is out-of-control
  - Examination of mitosis in onion cells and whitefish cells
  - Cancer research projects in library
  - Meiosis: formation of gametes in the gonads
  - One diploid cell forms four haploid cells
  - Comparing Mitosis & Meiosis
- Intro. To Genetics
  - What is meant by “genetics”?
  - Mendelian genetics
  - Punnnett squares and assessing genetic probability
  - Difficulty of assessing probability for non-Mendelian traits
  - Genotype vs. phenotype
  - Dominant vs. recessive traits
  - Polygenic traits
  - Other modes of inheritance
  - Genetic Disease projects
- Modern Genetics: DNA & RNA
  - Discovery of shape of DNA (1953)
  - DNA as a polymer of nucleotides
  - Role of DNA in transmission of genetic material
  - Protein Synthesis: DNA to mRNA to protein
  - Mutations and their significance
  - DNA and cancer
  - Genetic Engineering
  - What is genetic engineering?
  - What are some uses for genetic engineering?
  - How is genetic engineering done?
  - Ethical issues in genetic engineering
- The Human Genome
  - The Human Genome Project
  - DNA fingerprinting
  - Gene therapy
  - Other uses of genetic technology
  - Fact vs. Fiction in “Jurassic Park”, and other films/media
  - Ethical issues in genetic technology
- Darwin’s Theory of Evolution
  - Connections that exist throughout all of Earth’s life forms
  - All organisms are DNA-based (except certain viruses, which are not considered to be alive – so they are not really “organisms”)
  - All organisms are made of different combinations of only 20 amino acids
  - Nearly all organisms share various biochemical pathways
  - A history of various ideas of evolution through the millennia
  - Lamarckian evolution
  - Charles Darwin’s “Theory of Evolution by Natural Selection”
  - Comprehensive notes and observations eventually led to the development of a complex, cohesive theory of organic evolution over a period of 30 years
  - The significance of the term “adaptation” to biologists since Darwin
  - Evidence for evolution
  - Fossil evidence, including some intact fossil sequences, like that of whales and horses
  - Relative dating and radioactive dating of both fossils and rock strata
  - Geographic connections, e.g. fossils and geology support continental drift
  - Similarities in the structures (and functions) of various organisms
  - Biochemical similarities
  - Darwin’s theory
  - All organisms possess inheritable variations, and some variations are better than others for obtaining and using resources – these are ADAPTATIONS
  - Overproduction of offspring
  - A struggle for existence – competition for insufficient resources
  - Organisms with the best adaptations are MORE LIKELY to survive and reproduce
  - Species alive today are descended, with modifications, from previous species
  - All organisms on Earth are therefore descended from common ancestors
- Evolution of Populations
  - Modern theories of evolution
  - Populations evolve, individuals do not
  - Evidence for evolution from the Galapagos finches
Science

- Antibiotic resistance as evidence for evolution
  - The History of Life
  - Classification
  - Human Evolution, if time
- Animal Maintenance
- Digestion & Excretion
  - Adaptations for Maintenance
  - Diseases
- Circulation & Respiration
  - Adaptations for Maintenance
  - Diseases
- The Immune System
  - Adaptations for Maintenance
  - Diseases
- Skeleton & Muscles
  - Adaptations for Maintenance
  - Diseases
- Nervous & Endocrine Systems
  - Adaptations for Maintenance
  - Diseases
- Reproductive Systems
  - Adaptations for Maintenance
  - Diseases
  - Sexual vs. Asexual Reproduction
  - Reproductive Technology
- Plants
  - Roots, Stems, & Leaves
  - Reproduction of Seed Plants
  - Plant Responses & Adaptations
- Ecology & Environmental Science
  - The Biosphere
  - Ecosystems & Communities
  - Humans Impact on the Biosphere

- Cell Division
- Human Diseases by Topic
- Reproduction and Development
  - Asexual Reproduction in Organisms
  - Mitosis and Cytokinesis: Cellular Reproduction
  - Vegetative Propagation
  - Sexual Reproduction in Humans, Animals, and Plants
  - Gametogenesis and Meiosis
  - Fertilization, Early Development, Embryo Development, Birth
  - Reproductive Technology
- Transmission of Traits through Generations
  - Historical Perspective
  - Classical Mendelian Genetics
  - Incomplete Dominance, Codominance, Multiple Alleles
  - Gene Linkage, Sex Linkage, Pedigrees
  - Genetic Disorders
  - Mutations
  - Modern Genetics
  - Watson, Crick, and Franklin
- DNA: Nucleotides, Transcription, and Replication
- DNA Fingerprinting, Electrophoresis
- Genetic Engineering
- Protein Synthesis
- Population Genetics
- Bioethics
- Evolution
  - Organic Evolution
  - The Heterotroph Hypothesis
  - Supporting Evidence for Evolution
  - Lamarck, Darwin, Oparin, Stanley, Hardy-Weinberg
  - Sources of Variation
  - Adaptation and Natural Selection
  - Gradualism and Punctuated Equilibrium
  - Speciation
- Ecology
  - Populations, Communities, Ecosystems, Biosphere
  - Abiotic and Biotic Factors
  - Nutritional Relationships: Autotroph, Heterotroph
  - Symbiotic Relationships; Mutualism, Commensalism, Parasitism
  - Energy Flow in an Ecosystem
  - Food Webs, Food Chains
  - Nitrogen Cycle, Carbon Cycle, Water Cycle
  - Ecological Succession
  - Biomes
  - Human Impact on the Environment
  - Endangered Species
  - Pollution

Assessment: All Living Environment students who complete the required 1200 minutes of labs will take the Living Environment Regents Exam in June.

For the complete NYS Core Curriculum for Living Environment, see: http://www.emsc.nysed.gov/ciai/mst/pub/livingen.pdf

Living Environment - Honors

Code: S461 Full Year (9-10) (1 credit) (rank weight 1.05)
Prerequisite: Participation in the eighth grade Earth Science program with a minimum final average of 85%, or Science 8 with an average of 90% or better with teacher recommendation.

Areas of Study Include:
  - Biology as a Science
    - Scientific Method
    - Tools of Science
    - Microscope
    - Safety
  - Unity and Diversity Among Living Things
    - Concept of Life
    - Historical Perspective
    - Cytology
    - Taxonomy
    - Chemistry of Living Things: Organic & Inorganic
    - Enzymes
  - Cellular Processes
    - Transport
    - Respiration
    - Photosynthesis
  - Cell Division
  - Human Diseases by Topic
  - Reproduction and Development
    - Asexual Reproduction in Organisms
    - Mitosis and Cytokinesis: Cellular Reproduction
    - Vegetative Propagation
    - Sexual Reproduction in Humans, Animals, and Plants
    - Gametogenesis and Meiosis
    - Fertilization, Early Development, Embryo Development, Birth
  - Reproductive Technology
  - Transmission of Traits through Generations
    - Historical Perspective
    - Classical Mendelian Genetics
    - Incomplete Dominance, Codominance, Multiple Alleles
    - Gene Linkage, Sex Linkage, Pedigrees
    - Genetic Disorders
    - Mutations
    - Modern Genetics
    - Watson, Crick, and Franklin
  - DNA: Nucleotides, Transcription, and Replication
  - DNA Fingerprinting, Electrophoresis
  - Genetic Engineering
  - Protein Synthesis
  - Population Genetics
  - Bioethics
  - Evolution
    - Organic Evolution
    - The Heterotroph Hypothesis
    - Supporting Evidence for Evolution
    - Lamarck, Darwin, Oparin, Stanley, Hardy-Weinberg
    - Sources of Variation
    - Adaptation and Natural Selection
    - Gradualism and Punctuated Equilibrium
    - Speciation
  - Ecology
    - Populations, Communities, Ecosystems, Biosphere
    - Abiotic and Biotic Factors
    - Nutritional Relationships: Autotroph, Heterotroph
    - Symbiotic Relationships; Mutualism, Commensalism, Parasitism
    - Energy Flow in an Ecosystem
    - Food Webs, Food Chains
    - Nitrogen Cycle, Carbon Cycle, Water Cycle
    - Ecological Succession
    - Biomes
    - Human Impact on the Environment
    - Endangered Species
    - Pollution

Assessment: The final examination is the NY State prepared Living Environment Biology Regents if lab requirement is met.
NOTE: Students should have an above average reading grade level. Stress is placed on individual achievement.
PHYSICAL SETTING - CHEMISTRY
Code: S541 Full Year (10, 11) (1 Credit) (rank weight 1.00)
Prerequisite: Average of 75 or better in Living Environment and Earth Science Regents. Successful Completion of Geometry and Concurrently Enrolled In Algebra 2 recommended. Students enrolled in 2N need permission from the district director.

Areas of Study Include:
• Scientific Method
• Measurements
  - Using Measurement Equipment
  - Metric Units
  - Significant Figures
  - Scientific Notation
  - Percent Error
  - Density
• Matter And Energy
  - Physical And Chemical Properties Of Matter
  - Substances, Compounds, Elements And Mixtures
  - Temperature Scales, S.T.P. & Absolute Zero
  - Kinetic Molecular Theory
  - Charles’ Law, Boyle’s Law & Combined Gas Law
  - Rates Of Diffusion
  - Heating / Cooling Curves - Phase Changes
  - Vapor Pressure
  - Forms Of Energy
  - Law Of Conservation Of Energy
• Structure Of The Atom
  - Parts Of The Atom
  - History Of Models Of The Atom
  - Electron Configuration
  - Mass Number, Atomic Number, Isotopes
  - Valence Electrons, Oxidation Numbers
  - Energy Levels - Spectral Lines
  - Natural Radioactivity - Types Of Radiation
  - Half Life
• Periodic Table
  - Periodic Trends
  - Periodicity
• Bonding
  - Electronegativity
  - Ionic, Covalent, Metallic & Network Bonds
  - Molecular Polarity
  - Lewis Dot Structure
  - Use PR Theory shapes of molecules
  - Intermolecular Forces
  - Formula Writing and Reviewing Compounds
• Solutions
  - Concentration Units – Molarity, Percent By Mass, Parts per Million
  - Dilution
  - Solubility
  - Boiling Point Elevation, Freezing Point Depression
• Kinetics And Equilibrium
  - Collision Theory – Reaction Rate
  - Potential Energy Diagrams – Endothermic / Exothermic
  - Catalysts
  - Enthalpy, Entropy & Spontaneity
  - LeChatelier’s Principle
• Acids & Bases
  - Arrhenius & Alternate Acid-Base Theory
  - Properties Of Acids & Bases

Assessment: All Chemistry students who complete the required 1200 minutes of labs will take the Physical Setting – Chemistry Regents Exam in June.

For the complete NYS Core Curriculum for Physical Setting/Chemistry, see: http://www.emsc.nysed.gov/ciaai/mst/pub/chemist.pdf

CHEMISTRY - HONORS
Code: S561 Full Year (10-12) (1 credit) (rank weight 1.05)
Prerequisite: Honors Living Environment (average of 85% or better) or Regents Living Environment (average of 90% or better) and Honors Earth Science (average of 85% or better) OR Regents Earth Science (average of 90% or better) AND Geometry H (average of 85% or better) and concurrently enrolled in Algebra 2.

Areas of Study Include:
• Measurement
  - Metric Units
  - Significant Figures
  - Scientific Notation
  - Percent Error
  - Density
• Matter and Energy
  - Physical and Chemical Properties of Matter
  - Substances, Elements, Compounds and Mixtures
  - Temperature Scales, S.T.P., Absolute Zero
  - Kinetic Molecular Theory of Gases
  - Charles’ Law, Boyle’s Law & Combined Gas Law
  - Rates of Diffusion
  - Heating / Cooling Curves - Phase Changes
  - Vapor Pressure
  - Forms of Energy
  - Law of Conservation of Energy

- Ph
- Neutralization Reactions
- Titration – Indicators
- Oxidation – Reduction
  - Electrochemical Cells
  - Electrolysis
  - Activity Series
  - Assigning Oxidation States
  - Half Reactions
  - Balancing Redox Equations
  - Identify Species Oxidized / Species Reduced
• Nuclear
  - Types of Radioactivity
  - Natural & Artificial Transmutations
  - Half Life
  - Benefits and Risks of Radioactivity
  - Nuclear Binding Energy (optional)
• Organic
  - Homologous Series Of Hydrocarbons
  - Functional Groups
  - Isomers
  - Organic Reactions
• Chemical Math
  - Mole Calculations
  - Gram Formula Mass
  - Avogadro’s Number
• Stoichiometry
  - Types of Reactions
  - Writing and Balancing Equations

Assessment: All Chemistry students who complete the required 1200 minutes of labs will take the Physical Setting – Chemistry Regents Exam in June.

For the complete NYS Core Curriculum for Physical Setting/Chemistry, see: http://www.emsc.nysed.gov/ciaai/mst/pub/chemist.pdf
• Structure of the Atom
  - Parts of the Atom
  - History of Models of the Atom
  - Electron Configuration
  - Mass Number, Atomic Number, Isotopes
  - Valence Electrons, Oxidation Numbers
  - Energy Levels – Spectral Lines
• Periodic Table
  - Periodic Trends
  - Periodicity
• Bonding
  - Electronegativity
  - Ionic, Covalent, Metallic, and Network Bonds
  - Molecular Polarity
  - Lewis Dot Structures
  - VSEPR Theory – Shapes of Molecules
  - Intermolecular Forces
• Chemical Composition
  - Writing Formulas
  - Naming Compounds
  - Math of Chemical Formulas
• Chemical Equations and Stoichiometry
  - Types of Chemical Reactions
  - Balancing Equations
  - Stoichiometry
• Solutions
  - Concentration Units – Molarity, Percent by Mass, ppm
  - Dilution
  - Solubility
• Colligative Properties
• Kinetics and Equilibrium
  - Collision Theory – Reaction Rates
  - Potential Energy Diagrams – Endothermic / Exothermic
  - Catalysts
  - Enthalpy, Entropy, Spontaneity
  - Le Chatelier’s Principle
  - Common Ion Effect
• Acids and Bases
  - Arrhenius and Alternate Acid-Base Theory
  - Properties of Acids and Bases
  - pH
  - Neutralization Reactions
  - Titrations – Indicators
• Oxidation-Reduction
  - Electrochemical Cells
  - Electrolysis
  - Activity Series
  - Assigning oxidation numbers
  - Oxidizing Agent
  - Reducing Agent
  - Half Reactions
  - Balancing Redox Reactions
• Nuclear
  - Natural and Artificial Transmutations
  - Fission and Fusion
  - Half Life
  - Natural Radioactivity - Type of Radiation
  - Benefits and risks of radioactivity
• Organic
  - Homologous Series of Hydrocarbons
  - Functional Groups
  - Isomers
  - Organic Reactions
• Additional Optional Topics
  - Ideal Gas Law
  - Dalton’s Law of Partial Pressures
  - Graham’s Law of Diffusion
  - Quantum Numbers
  - Conjugate Acid-Base Pairs
  - Lewis Acids and Bases
  - Limiting reactant
  - Hess’s Law
  - Hybridization
  - Phase Diagrams
  - Resonance

Assessment: All Chemistry students who complete the required 1200 minutes of labs will take the Physical Setting – Chemistry Regents Exam in June.

**PRACTICAL CHEMISTRY - NON-REGENTS**

Code: S538  Full Year (11, 12)(1 Credit)(Rank Weight=1.00)

Prerequisite: Passing grades on at least one Science Regents exam

Recommendation: None

Practical Chemistry is a course that combines traditional chemistry concepts with applications in the real world. The first half of the course involves study in specific areas of chemistry with a focus on chemical reactivity and qualitative analysis while the second half of the course applies those base concepts with practical concepts integral to students' lives and futures.

Areas of Study may Include:

• Scientific Calculation and Measurement
  - Lab Safety
  - Scientific Method
  - Graphing
  - Use of computer software (spreadsheets, etc.)
  - Problem solving techniques
• Matter and Energy
  - Laws of Conservation
  - Physical & chemical properties and changes
  - Intermolecular vs. intramolecular forces
  - Particle arrangement
  - Phases of matter
  - Atomic Structure
  - Elements and compounds
  - Periodic Table
  - Naming of compounds
  - Equation writing and balancing
• Atmospheric Chemistry
  - Global Warming
  - Comparison of different atmospheres
  - Ozone Depletion
  - Acid Rain
  - Science of Space and Vacuum
• Acids and Bases
  - Definitions
  - Strong vs. Weak
  - Concentrated vs. Dilute
  - Reactions involving acids and bases
  - pH scale
  - Titrations and Hydrolysis
• Electrochemistry
  - Oxidation and Reduction
Areas of Study Include:

- Regents Exam.
- Regents Science course. A 75 or better on previous Mathematics of 75, concurrently enrolled in Algebra 2 and an average of 75 in a Prerequisite: Successful completion of Geometry with an average of 75, concurrently enrolled in Algebra 2 and an average of 75 in a Regents Science course. A 75 or better on previous Mathematics Regents Exam.

Assessment: School final exam in addition to a comprehensive course project.

PHYSICAL SETTING - PHYSICS

Code: S641 Full Year (11-12) (rank weight 1.00)

Prerequisite: Successful completion of Geometry with an average of 75, concurrently enrolled in Algebra 2 and an average of 75 in a Regents Science course. A 75 or better on previous Mathematics Regents Exam.

Areas of Study Include:

- Physics And Measurement
  - Si Units – (Length, Mass, Time); Dimensional Analysis; Significant Figures; Problem Solving; Estimations, Error, And Error Analysis
- Motion In One Dimension
  - Displacement, Velocity, Speed: Instantaneous Velocity, Speed; Acceleration; Kinematic Graphics; Free Fall
- Vectors
  - Coordinate Systems; Vectors And Scalars; Vector Addition And Subtraction; Vector Components; Conditions For Equilibrium
- Motion In Two Dimensions
  - Two Dimensional Motion With Constant Acceleration; Motion In A Plane And Projectiles; Uniform Circular Motion; Relative Motion
- The Laws Of Motion
  - Concept Of Force; Newton’s First Law And Inertial Frames; Mass, Newton’s Second Law; Application Of Newton’s 2nd Law To Systems Of Bodies; Force And Gravity, Friction
- Circular Motion And Applications Of Newton’s Laws
  - Circular Motion; Centripetal Force
- The Law Of Gravity
  - Newton’s Universal Law Of Gravitation; Free Fall And Gravitational Force; Kepler’s Laws; Gravitational Potential Energy; Energy Considerations In Planetary And Satellite Motion
- Linear Momentum And Collisions
  - Linear Momentum And Its Conservation; Impulse And Momentum; Collisions In One Dimension
- Work And Kinetic Energy
  - Work Done By A Constant Force; Scalar Product; Work Done On A Spring; Energy And The Work-Energy Theorem; Power
- Potential Energy And Conservation Of Energy
  - Potential Energy; Conservative And Non-conservative Forces; Conservative Forces And Potential Energy; Conservation Of Mechanical Energy
- Oscillatory Motion
  - Simple Harmonic Motion; The Block And Spring System; Energy Of A Simple Harmonic Oscillator; The Pendulum; Simple Harmonic Motion And Uniform Circular Motion
- Wave Properties
  - Waves And Energy Transfer; Transverse And Longitudinal Waves; Wave Properties; Law Of Superposition
- Wave Phenomena
  - Speed Of A Wave In A Uniform Medium; Reflection; Refraction; Interference; Diffraction (Ripple Tanks)
- Sound
  - Properties Of Sound; Speed Of Sound; Resonance; Doppler Effect; Harmonics
- Electrostatics
  - Properties Of Charges; Insulators And Conductors; Coulomb’s Law; Conservation Of Charge
- Electric Fields
  - Direction And Magnitude; Electric Potentials; Field Lines; Mapping
  - Electric Fields
  - Current Electricity
  - Resistivity And Resistance; Requirements For Current Flow; Ohm’s Law; Electric Energy And Power
- Series And Parallel Circuits
  - Electric Potential, Current, And Resistance In Series And Parallel Circuits; Galvanometer, Voltmeter, And Ammeter; DC Power Supplies; Power Consumption In DC Circuits; Household Circuits And Electrical Safety
- Magnetic Fields
  - The Magnetic Field; Mapping Magnetic Fields; Magnetic Force On A Current-Carrying Conductor; Motion Of A Charged Particle In A Uniform Magnetic Field; Magnetic Field Strength And Magnetic Force; Right-Hand Rules
- Magnetic Force
  - Magnetic Force Between Two Parallel Conductors; Magnetic Flux; The Earth’s Magnetic Field; Right-Hand Rules
- Electromagnetic Induction
  - Electromagnetic Induction; Lenz’s Law; Motors And Generators; Ac Current; Solenoids
- Light
  - Electromagnetic Nature Of Light; Light As A Wave; Speed Of Light; Properties Of Light; Polarization; Doppler Effect
- Modern Physics
  - Wave-Particle Duality Of Light; Quantum Theory; Bohr Model Of The Atom; Energy Transitions In The Hydrogen Atom; Continuous, Emission, And Absorption Spectra; Compton Effect
- Standard Model
  - Investigation Of Sub-Atomic Particles; Standard Model Of Particle Physics; Quarks And Leptons; Classification Of Matter

Assessment: All Physics students who complete the required 1200 minutes of labs will take the Physical Setting – Physics Regents Exam in June.

For the complete NYS Core Curriculum for Physical Setting/Physics, see: http://www.emsc.nysed.gov/mst/pub/phycoresci.pdf
PHYSICS - HONORS
Code: S661  Full Year (11-12) (rank weight 1.05)
Prerequisite: Successful completion of geometry with 85 or better, concurrently enrolled in Algebra 2. An 85 or better on a previous Science and Mathematics regents exam.

• Physics And Measurement
  - Si Units — (Length, Mass, Time); Dimensional Analysis; Significant Figures; Problem Solving; Fermi Problems estimations, Error, And Error Analysis
• Motion In One Dimension
  - Displacement, Velocity, Speed; Instantaneous Velocity, Speed; Acceleration; Kinematic Graphics; Free Fall
• Vectors
  - Coordinate Systems; Vectors And Scalars; Vector Addition And Subtraction; Vector Components; Conditions For Equilibrium—static and dynamic
• Motion In Two Dimensions
  - Two Dimensional Motion With Constant Acceleration; Motion In A Plane And Projectiles; Uniform Circular Motion; Relative Motion;
• The Laws Of Motion
  - Concept Of Force; Newton's First Law And Inertial Frames; Mass, Newton’s Second Law; Application Of Newton's 2nd Law To Systems Of Bodies; Force And Gravity, Friction
• Circular Motion And Applications Of Newton's Laws
  - Circular Motion; Centripetal Force; Torque;
• The Law Of Gravity
  - Newton’s Universal Law Of Gravitation; Free Fall And Gravitational Force; Kepler's Laws; Gravitational Potential Energy; Energy Considerations In Planetary And Satellite Motion
• Linear Momentum And Collisions
  - Linear Momentum And Its Conservation; Impulse And Momentum; Collisions
• Work And Kinetic Energy
  - Work Done By A Constant Force; Scalar Product; Work Done On A Spring; Kinetic Energy And The Work-Energy Theorem; Power
• Potential Energy And Conservation Of Energy
  - Potential Energy; Conservation Of Mechanical Energy
• Fluid Physics Archemides Principle, Bernoulli’s Principle
• Thermal Physics
  - Temperature Scales; Heat Transfer; Laws Of Thermodynamics
• Wave Properties
  - Waves And Energy Transfer; Transverse And Longitudinal Waves; Wave Properties; Law Of Superposition
• Wave Phenomena
  - Speed of A Wave In A Uniform Medium; Reflection; Refraction; Interference; Diffraction [Ripple Tanks]
• Sound
  - Properties Of Sound; Speed Of Sound; Resonance; Doppler Effect;
• Electrostatics
  - Properties Of Charges; Insulators And Conductors; Coulomb's Law; Conservation Of Charge
• Electric Fields
  - Direction And Magnitude; Electric Potentials; Field Line Mapping
• Electric Potential & Electric Potential Energy; Series And Parallel Circuits
• Current Electricity

- Resistivity and Resistance; Requirements For Current Flow; Ohm's Law; Electric Energy & Power
- Series & Parallel Circuits
  - Electric Potential, Current, Resistance In Series And Parallel Circuits; Galvanometer, Voltmeter,And Ammeter; DC Power Supplies; Power Consumption In DC Circuits; Household Circuits And Electrical Safety
- Magnetic Fields
  - The Magnetic Field; Mapping Magnetic Fields, Magnetic Force On A Current-Carrying Conductor; Motion Of A Charged Particle In A Uniform Magnetic Field; Magnetic Field Strength And Magnetic Force; Right-Hand Rules
- Magnetic Force
  - Magnetic Force Between Two Parallel Conductors; Magnetic Flux; The Earth's Magnetic Field; Right-Hand Rules
- Electromagnetic Induction
  - Electromagnetic Induction; Lenz’s Law; Motors And Generators; AC Current; Transformers
• Light
  - Electromagnetic Nature Of Light; Light As A Wave; Speed Of Light; Refraction; Dispersion; Properties Of Light; Polarization; Doppler Effect
• Mirrors & Optics
  - Plane Mirrors; Spherical Mirrors; Ray Tracing; Thin Lenses
• Modern Physics
  - Wave-Particle Duality Of Light; Quantum Theory; Bohr & Rutherford Models Of The Atom; Energy Transitions In The Hydrogen Atom; Continuous, Emission & Absorption Spectra; Compton Effect; Photoelectric Effect; Radioactivity;
• Standard Model
  - Investigation of Sub-Atomic Particles; Standard Model Of Particle Physics; Hadrons, Mesons, Quarks And Leptons; Classification Of Matter; Four Fundamental Forces Of Nature

Assessment: All Physics students who complete the required 1200 minutes of labs will take the Physical Setting – Physics Regents Exam in June.

For the complete NYS Core Curriculum for Physical Setting/Physics, see: http://www.emsc.nysed.gov/ciai/mst/pub/phycoresci.fdf

CONCEPTUAL PHYSICS - NON-REGENTS
Code: S639  Full Year (11-12) (rank weight 1.00)
Prerequisite: Two years of math and science, and a grade of 65 or better on at least one Math and one Science Regents Exam.

Areas of Study May Include:
• Reality And Illusions
  - Measurement & Data Collection; Accuracy Of Measurements; Patterns In Data To Make Predictions; Scientific modeling; Theoretical and Experimental Probability; Nature of Scientific Discovery; The Atom and Radioactive Decay
• Motion
  - Newton’s Laws Of Motion; Force; Friction; Speed & Acceleration; Relationship Between Force, Mass and Acceleration; Circular Motion (Centripetal Acceleration And Force) Bernouilli’s Principle and fundamentals of flight, waves.

TRANSPORTATION
• Light
  - Properties of light; visible and Invisible light; Spectrum; Speed of light; Lenses and camera obscura
• Driving The Roads
**SCIENCE**

- Response Time; Speed, Distance And Time Relationships; Acceleration; Average and Instantaneous Speed; Inertia; Force And Friction; Gravity; Circular Motion

**Safety**
- Effect Of Forces On Motion; Inertia; Force And Pressure; Newton As A Unit Of Force Measurement; Impulse And Momentum; Acceleration; Collisions

**Journey to the Moon and Beyond**
- Physical Properties Of Matter; Effect Of Forces On Motion; Acceleration Due To Gravity; Free Fall; Inertial And Gravitational Mass; Newton's Laws of Motion; Photosynthesis; Fermi Problem; Sound Waves; Speed Of Radio And Sound Waves

**Track & Field Championships**
- Relationship Between Speed, Distance And Time; Kinetic Energy; Using Data To Make Predictions; Average And Instantaneous Speed; Acceleration; Projectile Motion; Trajectories; Gravity; Free Fall; Gravitational Potential Energy; Transfer Of Mechanical Energy; Conservation Of Energy

**Physics In Action**
- Newton's First Law Of Motion And Galileo's Principle Of Inertia; Newton's Second Law Of Motion (Relationship Between Mass, Force And Acceleration); Newton's Third Law Of Motion; Gravity; Center Of Mass; Potential And Kinetic Energy; Work; Momentum And Conservation Of Momentum; Circular Motion (Centripetal Acceleration and Force)

**Sports On The Moon**
- Newton's Laws Of Motion; Properties Of Matter On Earth And In Space; Effect Of Forces On Motion; Gravity And Mass On The Earth And Moon; Relationship Between Gravity And Free Fall; Effect Of Gravity On The Trajectory In Projectile Motion; Effect Of Gravity On Friction; Collisions; Coefficient Of Restitution; Momentum; Pendulum Motion

**Climate**
- Greenhouse Effect; Insolation; Inverse Square Laws; Light Intensity and Newton's Law Of Universal Gravitation; Solar Energy; Newton's Law Of Cooling

**Electricity**
- Static and Current Electricity; Ohm's Law; Cost Of Energy Consumption; Series And Parallel Circuits; Power; Electrical Lighting; Magnetic Fields

**Simple Machines**
- Forces,Levers, Pulleys, Mechanical Advantage And Practical Applications

**Chemistry - AP**

**CHEMISTRY - AP**

**Code:** S682  **Full Year (11-12) (1 credit) (rank weight 1.10)**

**Prerequisite:** Honors or Regents Chemistry (average of 85% or better, in Honors, 90% better in Regents).

**Successful completion of Algebra 2 (average of 85% or better).**

**Approval by District Science Director.**

**Seniors:** Concurrent course in physics recommended.

**Areas of Study Include:**

- **Atomic Structure I**
  - History
  - Structure of the Atom
  - Mass Number, Atomic Number, Isotopes
  - Mass Spectrometry
  - Natural Radioactivity

- **Stoichiometry**
  - Average Atomic Mass
  - Mole Conversions
  - Percent Composition, Empirical and Molecular Formulas
  - Balancing Equations
  - Stoichiometry, Including Limiting Reagent
  - Theoretical and Percent Yields

- **Chemical Reactions**
  - Electrolytes
  - Concentration Units - Dilution, Beer's Law
  - Precipitation, Neutralization, Redox

- **Gases**
  - Charles', Boyle's, combined gas law and Avogadro's Laws
  - Ideal Gas Law
  - Dalton's Law of Partial Pressures
  - Kinetic Molecular Theory of Gases
  - Graham's Law of Diffusion
  - Van der Waal's Equation for Real Gases

- **Energy**
  - PV Work
  - Calorimetry - Hess's Law
  - Standard Heat of Formation, Bond Energy
  - Entropy
  - Gibb's Free Energy - Spontaneity

- **Bonding**
  - Electronegativity
  - Ionic, Covalent, Metallic, and Network Bonds
  - Molecular Polarity - Dipole Moments
  - Lewis Structures, Resonance
  - VSEPR Theory - Hybridization
  - Bond Order - Sigma and Pi Bonds
  - Intermolecular Forces
  - Vapor Pressure - Phase Diagrams
  - Boiling Point Elevation, Freezing Point Depression, Osmotic Pressure

- **Kinetics**
  - Collision Theory - Reaction Rates
  - Rate Law, Integrated Rate Law
  - Reaction Mechanisms
  - Potential Energy Diagrams
  - Activation Energy, Catalysts

- **Equilibrium**
  - Mass Action Expression
  - Gaseous Equilibrium, Solubility Equilibria
  - Common Ion Effect
  - Complex Ion Equilibria
  - Le Chatelier's Principle
  - Acids and Bases and Salts
  - Acid – Base Equilibria
  - Conjugate Acid-Base Pairs
  - pH, pOH, Kw
  - Titration Curves/Indicators
  - Buffers

- **Oxidation-Reduction**
  - Galvanic Cells
  - Electrolytic cells
  - Standard Reduction Potential

Assessments: Final exam is given in class over a two-day period
- Nuclear
  - Natural and Artificial Transmutations
  - Mass Defect – Binding Energy
  - Fission and Fusion
  - Half Life
- Organic
  - Homologous Series of Hydrocarbons
  - Functional Groups
  - Isomers
  - Organic Reactions

Assessment: Each student is expected to take the AP Chemistry Exam in May. The fee is determined by the College Board and is the responsibility of the student. In the event that a student does not take the AP Exam, the student’s report card and transcript will reflect only a course at the honors-type level.

For the complete AP Curriculum see: http://apstudent.collegeboard.org

ADVANCED GEOLOGY
Code: S685 Full Year (11-12) (1 credit) (rank weight 1.05)
Recommendation: Completion of Earth Science and Geometry. Juniors are encouraged to have taken or be taking a course in Chemistry. Seniors are encouraged to have taken or be taking a course in Physics.

Areas of Study Include:
- Overview of the Dynamic Earth
- Formation of our solar system
- Internal Structure of Planet Earth
- External Structure of Planet Earth
- External and Internal Structure Interactions
- Geologic Time Scale
- Minerals of the Earth
- Minerals and Their Chemistry
- Crystal Structure and States of Matter
- Properties of Minerals and Their Identifications
- Rock Forming Minerals
- Economic Minerals
- Formation of Ore Deposits
- Economic and Environmental Factors
- Renewable and Non-Renewable Resources
- Petrology
- Igneous Rocks
- Magma and Magmatic Rocks
- Lava, and Volcanic Features
- Igneous Rock Identification
- Structure of Plutons
- Origin of Magma
- Bowen’s Reaction Series
- Sedimentary Rocks
- Origin of Sediments
- Lithification and Diagenesis
- Sedimentary Rock Identification
- Depositional Environments
- Metamorphic Rocks
- Factors Controlling Metamorphism
- Metamorphic Structures
- Types of Metamorphism
- Metamorphic Rock Identification
- Plate Tectonics and Metamorphism
- Evolution of Landforms and Landscapes
- Weathering and Soils

ADVANCED PLACEMENT - PHYSICS C
Code: S686 Full Year (12) (1 Credit) (rank weight 1.10)
Prerequisite: Current or previous enrollment in a Calculus course required. Successful completion of Regents Physics and strong history in other Regents Math and science courses. This course is intended as a second year Physics course.

Areas of Study Include:
- Physics And Measurement
  - SI Units – (Length, Mass, Time); Dimensional Analysis; Significant Figures; Problem Solving; - Estimations, Error, And Error Analysis
- Motion In One Dimension
  - Displacement, Velocity, Speed; Instantaneous Velocity, Speed; Acceleration; Kinematic Graphics; Free Fall
- Vectors
  - Coordinate Systems; Vectors And Scalars; Vector Addition And Subtraction; Vector Components; Unit And I-J-K Vectors
- Motion In Two Dimensions
  - Two Dimensional Motion With Constant Acceleration; Motion In A Plane And Projectiles; Uniform Circular Motion; Relative Motion
- The Laws Of Motion
  - Concept Of Force; Newton's First Law And Inertial Frames; Mass, Newton’s Second Law; Application Of Newton’s 2nd Law To Systems Of Bodies; Force And Gravity, Friction
- Circular Motion And Applications Of Newton’s Laws
  - Circular Motion; Centripetal Force; Non-uniform Circular Motion; Motion In A Resistive Medium
- Work And Kinetic Energy
  - Work Done By A Constant Force; Scalar Product; Work Done By A Variable Force; Work Done On A Spring; Kinetic Energy And The Work-Energy Theorem; Power And Efficiency
- Potential Energy And Conservation Of Energy
- Potential Energy; Conservative And Non-conservative Forces; Conservation Of Mechanical Energy; Potential Energy Function
- Linear Momentum And Collisions
  - Linear Momentum And Its Conservation; Impulse And Momentum; Collisions In One Dimension; Collisions In Two Dimensions; Center Of Mass; Rocket Propulsion
  - Rotation Of A Rigid Object About A Fixed Axis
  - Angular Displacement, Velocity, And Acceleration; Rotational Kinematics; Angular And Linear Quantities; Rotational Energy; Calculations Of Moments Of Inertia; Torque and Angular Acceleration; Work, Power, and Energy In Rotational Motion
- Rolling Motion And Angular Momentum
  - Rolling Motion Of A Rigid Body; Kinetic Energy Of A Rolling Body; Angular Momentum Of A Particle; Angular Momentum Of A Rolling Rigid Body; Conservation Of Angular Momentum
- Static Equilibrium And Elasticity
  - Conditions For Equilibrium; First Condition Of Equilibrium; Second Condition For Equilibrium; Cranes Ladders And Other Systems; Thermal Expansion, Elasticity
- Oscillatory Motion
  - Simple Harmonic Motion; The Block And Spring System; Energy Of A Simple Harmonic Oscillator; The Pendulum; Simple Harmonic Motion And Uniform Circular Motion; Damped Oscillations
- The Law Of Gravity
  - Newton's Universal Law Of Gravitational; Measuring The Gravitational Constant; Free Fall and Gravitational Force; Kepler's Laws; Gravitational Potential Energy; Energy Considerations In Planetary And Satellite Motion
- Electrical Fields
  - Properties Of Charges; Insulators And Conductors; Coulomb's Law; Electrical Fields, Electrical Fields Of Continuous Charge Distribution; Electrical Field Lines; Motion Of Charged Particles In A Uniform Electric Field.
- Gauss' Law
  - Electric Flux; Gauss' Law; Application Of Gauss’ Law To Charged Insulators; Conductors In Electrostatic Equilibrium
- Electrical Potential
  - Potential Difference And Electric Potential; Potential Differences In A Uniform Electric Field; Electrical Potential And Potential Energy Due To Point Charges; Relating Electric Potential To The Electric Field; Electric Potential Due To A Continuous Charge Distribution; Electric Potential Due To A Charged Conductor; The Millikan Oil-Drop Experiment; Applications Of Electrical Potential-
- Capacitance And Dielectrics
  - Capacitance; Calculating Capacitance; Combinations Of Capacitors; Energy Stored In A Charged Capacitor; Capacitors With Dielectrics; Equivalent Capacitance; Electric Dipole In An Electric Field
- Current And Resistance
  - Electric Current; Resistance And Ohm’s Law; A Model Of Electric Conductivity; Resistance And Temperature; Electrical Energy And Power.
- Direct Current Circuits
  - Emf; Resistors In Series, Parallel, And Combination; Ohm’s Law For An Entire Circuit; Kirchhoff’s Rules; Rc Circuits; Voltmeters, Ammeters, And Galvanometers; Household Circuits And Electrical Safety
- Magnetic Fields
  - The Magnetic Field; Magnetic Force On A Current-Carrying Conductor; Torque On A Current Loop In A Uniform Magnetic Field; Motion Of A Charged Particle In A Uniform Magnetic Field; Magnetic Field Strength And Magnetic Force
- Sources Of Magnetic Fields
  - The Biot-Savart Law; Magnetic Force Between Two Parallel Conductors; Ampere’s Law; Magnetic Flux; Gauss’ Law For Magnetism' Displacement Current And Ampere’s Law; The Earth’s Magnetic Field
- Faraday's Law
  - Faraday’s Law Of Induction; Motional Emf; Lanz's Law; Induced Emf; Motors And Generators; Maxwell's Equations
- Inductance
  - Self Inductance; Rl Circuits; Energy In A Magnetic Field; Mutual Inductance; Lc Circuits


For the complete AP Curriculum see: http://apcentral.collegeboard.com

### ADVANCED PLACEMENT - ENVIRONMENTAL SCIENCE

**Code:** S687  **Full Year (12) (1 credit) (rank weight 1.10)**

**Prerequisite:** Earth Science and Living Environment

Recommendation: Student must have achieved a final average 85% or higher in Earth Science and Living Environment; Chemistry preferred or taking concurrently. Approval by District Science Director.

Students are expected to take the AP Environmental Science exam in May. Any student who does not take the AP exam will be re-registered into a non-AP level course number.

**NOTE:** Laboratory and field investigations are a required component to this course.

**Areas of Study Include:**

- Earth Systems and Resources
  - Earth Science Concepts (Geologic time scale; plate tectonics, earthquakes, volcanism; seasons; solar intensity and latitude)
  - The Atmosphere (Composition; structure; weather and climate; atmospheric circulation and the Coriolis Effect; atmosphere-ocean interactions; ENSO)
  - Global Water Resources and Use (Freshwater/saltwater; ocean circulation; agricultural, industrial, and domestic use; surface and groundwater issues; global problems; conservation)
  - Soil and Soil Dynamics, Rock cycle; formation; composition; physical and chemical properties; main soil types; erosion and other soil problems; soil conservation)
  - The Living World
    - Ecosystem Structure (Biological populations and communities; ecological niches; interactions among species; keystone species; species diversity and edge effects; major terrestrial and aquatic biomes)
    - Energy Flow (Photosynthesis and cellular respiration; food webs and trophic levels ecological pyramids)
    - Ecosystem Diversity (Biodiversity; natural selection; evolu-
- Nuclear Energy (Nuclear fission process; nuclear fuel; energy production; nuclear reactor types; environmental advantages/disadvantages; safety issues; radiation and human health; radioactive wastes; nuclear fusion)

- Renewable Energy (Solar energy; solar electricity; hydrogen fuel cells; biomass; wind energy; small-scale hydroelectric; ocean waves and tidal energy; geothermal; environmental advantages/disadvantages).

- Population

- Population Biology Concepts (Population ecology; carrying capacity; reproductive strategies) Human Population

- Human population dynamics (Historical population sizes; distribution; fertility rates; growth rates and doubling times; demographic transition; age-structure diagrams)

- Population size (Strategies for sustainability; case studies; national policies)

- Impacts of population growth (Hunger; disease; economic effects; resource use; habitat destruction)

- Land and Water Use

- Agriculture

- Feeding a growing population (Human nutritional requirements; types of agriculture; Green Revolution; genetic engineering and crop production; deforestation; irrigation; sustainable agriculture)

- Controlling pests (Types of pesticides; costs and benefits of pesticide use; integrated pest management; relevant laws)

- Forestry (Tree plantations; old growth forests; forest fires; forest management; national forests)

- Rangelands (Overgrazing; deforestation; desertification; rangeland management; federal rangelands)

- Other Land Use

- Urban land development (Planned development; suburban sprawl; urbanization)

- Transportation infrastructure (Federal highway system; canals and channels; roadless areas; ecosystem impacts)

- Public and federal lands (Management; wilderness areas; national parks; wildlife refuges; forests; wetlands)

- Land conservation options (Preservation; remediation; mitigation; restoration) Sustainable land-use strategies

- Mining (Mineral formation; extraction; global reserves; relevant laws and treaties)

- Fishing (Fishing techniques; overfishing; aquaculture; relevant laws and treaties) Global Economics Globalization; World Bank; Tragedy of the Commons; relevant laws and treaties

- Energy Resources and Consumption

- Energy Concepts

- Energy Concepts (Energy forms; power; units; conversions; Laws of Thermodynamics)

- Energy Consumption

- History (Industrial Revolution; exponential growth; energy crisis)

- Present global energy use

- Future energy needs

- Fossil Fuel Resources and Use (Formation of coal, oil, and natural gas; extraction/purification methods; world reserves and global demand; synfuels; environmental advantages/disadvantages)

- Nuclear Energy (Nuclear fission process; nuclear fuel; electricity production; nuclear reactor types; environmental advantages/disadvantages; safety issues; radiation and human health; radioactive wastes; nuclear fusion)

- Hydroelectric Power (Dams; flood control; salmon; silting; other impacts)

- Energy Conservation (Energy efficiency; CAFE standards; hybrid electric vehicles; mass transportation)

- Renewable Energy (Solar energy; solar electricity; hydrogen fuel cells; biomass; wind energy; small-scale hydroelectric; ocean waves and tidal energy; geothermal; environmental advantages/disadvantages).

- Pollution

- Pollution Types

- Air pollution (Sources-primary and secondary; major air pollutants; measurement units; smog; acid deposition-causes and effects; heat islands and temperature inversions; indoor air pollution; remediation and reduction strategies; Clean Air Act and other relevant laws)

- Noise pollution (Sources; effects; control measures)

- Water pollution (Types; sources, causes, and effects; cultural eutrophication; groundwater pollution; maintaining water quality; water purification; sewage treatment/septic systems)

- Solid waste (Types; disposal; reduction)

- Impacts on the Environment and Human Health

- Hazards to human health (Environmental risk analysis; acute and chronic effects; dose response relationships; air pollutants; smoking and other risks)

- Hazardous chemicals in the environment (Types of hazardous waste; treatment/disposal of hazardous waste; cleanup of contaminated sites; bio-magnification; relevant laws)

- Economic Impacts (Cost-benefit analysis; externalities; marginal costs; sustainability)

- Global Change

- Stratospheric Ozone (Formation of stratospheric ozone; ultraviolet radiation; causes of ozone depletion; strategies for ozone depletion; relevant laws and treaties)

- Global Warming (Greenhouse gases and the greenhouse effect; impacts and consequences of global warming; reducing climate change; relevant laws and treaties)

- Loss of Biodiversity

- Habitat loss; overuse; pollution; introduced species; endangered and extinct species

- Maintenance through conservation

- Relevant laws and treaties

---

**ADVANCED PLACEMENT BIOLOGY/DCC**

**BIOLOGY 105/106**

Code: 5688 Full Year (11-12)* 1 credit (rank weight 1.10)

**Prerequisite:** Honors or Regents Biology and Honors or Regents Chemistry. All others approval by the district coordinator. Students are expected to have at least an 85% average in previous science courses, for Honors, 90% or better for Regents.

**NOTE:** This course can include labs with dissection components. The final exams are approved by Dutchess Community College. Successful completion of these exams can result in up to eight college credits issued by Dutchess Community College. Each student is expected to take the Advanced Placement in May. The fee is determined by the College Board and is the responsibility of the student.

**Areas of Study Include:**

- Molecules and Cells
  - Chemistry of Life
  - Water
  - Organic molecules in organisms
  - Free energy changes

---

**Page 67**
- ocean currents
- sandy and rocky environments
- estuaries and mangroves
- coral reef environment

Organisms structure, classification, and adaptations
- Marine Algae and plants
- Plankton
- Stinging tentacle animals
- jellyfish
- sea anemones
- coral
- hydroids
- softbodied animals
- bivalves
- gastropods
- cephalopods
- mollusks
- crustaceans
- lobsters and crabs
- shrimps and arthropods
- spiny-skinned animals
- sea stars
- sea urchins and sand dollars
- echinoderms
- fishes
- jawless fish and protochordates
- cartilaginous fish (sharks, skates and rays)
- bony fish
- marine reptiles and birds
- marine mammals
- whales
- dolphins

Ocean Conservation
- Overfishing
- Ocean Acidification/ Coral Bleaching
- Endangered species
- Marine resources

ASTRONOMY: A STUDY OF “OUR SPACE”
Code: S640 Full Year (11-12) (1 credit) (rank weight 1.0)
Prerequisite: Successful completion of two years of Science and a 75 or better on one Science Regents Exam.

Areas of Study Include:
- The Celestial Sphere
- Shape of the sky
- Measuring distances and directions on the sky
- Objects “on” the sky
- Constellations
- Viewing the sky (telescopes)
- History of Astronomy
- The observers and borrowers (using the sky to pace daily life)
- The theorists (seeking to explain through observation)
- The discoverers (building off of Newtonian mechanics to predict celestial activity)
- The Scale of the Universe
- Light years
- Orders of magnitude
- Sizes of objects
- The Sun and Stars
- Star types
- Stellar evolution
- Sol (our sun)
- The Solar System
Formation of our solar system
inner planets (with asteroids, meteors, and meteorites)
outer planets
Kuiper belt and Oort cloud

- Our Space Missions
  “Thousands of years worth of dreams and fantasy”
  The Rocket
  Sputnik / NASA
  Project Mercury
  Gemini
  Apollo (esp. 11)
  Space Shuttle
  Robotic missions
- The Galaxies and Universe
  Big Bang
  Galaxies
  Cosmology
- The Future
  Space economy / tourism
  The search for life
  Colonization and beyond

Assessment: School generated Final Exam

FORENSIC SCIENCE - PROJECT ADVANCE
CHEMISTRY 113 - (Syracuse University)
Concurrent Enrollment
Code: S714  Full Year (12)  1 credit  (rank weight 1.10)
Prerequisite: Successful completion of three years of Regents science including Chemistry and Living Environment as well as successful completion of at least three years of Regents math. Student must be recommended by the previous year’s science teacher. Director approval required. This course is designed as a Senior year elective.
4 college credits available from Syracuse University (Additional fee payable directly to college)

Areas of Study
Forensic Science is focused upon the application of scientific methods and techniques to crime and law. Recent advances in scientific methods and principles have had an enormous impact upon law enforcement and the entire criminal justice system. In this course, scientific methods specifically relevant to crime detection and analysis will be presented.

Areas of Study Include:
1 History of Forensic Science
2 Intro overview of the Law
3 Forensic Psychology
4 Trace Evidence Analysis
5 Serology and Bloodspatter
6 Hair and Fiber
7 Soil
8 Firearms and Ballistics
9 Cryptanalysis
10 DNA
11 Toxicology
12 Forensic Pathology and Death Investigation

As a concurrent enrollment with Syracuse University students would obtain four college credits for their work in this course at a very reasonable cost. These credits would transfer to the student’s college of choice thereby providing the families with savings towards their total college costs.
SECOND LANGUAGE

The goal of the Foreign Language program is to develop in each student the ability to understand and communicate verbally, as well as to read and write in the foreign language. Students develop a knowledge of vocabulary, a knowledge of the structure of the language, the ability to read the language at sight, and the appreciation of the contributions to our culture of the people whose language is being studied. The students are aided in speaking and in understanding the target language through frequent use of video and audio recordings and authentic materials.

GRADUATION REQUIREMENTS

1) In order to satisfy the minimum graduation requirements for any New York State diploma, unless specifically exempted by an Individualized Education Plan (I.E.P.), all students must earn one (1) unit of foreign language credit by either a) completing two (2) years of foreign language study and passing the Local Proficiency Exam at the junior high school level, or b) passing one (1) high school foreign language course. Students exempted from this requirement by an I.E.P. must substitute one (1) credit in another subject area in place of the foreign language credit.

2) In order to qualify for an Advanced Regents Diploma, unless specifically exempted by an I.E.P., all students must complete a sequence of three (3) credits and pass the District Level 3 Final Exam in a foreign language. Students exempted from this requirement by an I.E.P. must substitute three (3) credits in some other subject area(s) in place of the foreign language sequence.

(Note: A sequence of five (5) credits in Art, Music, Business, Technology or Vocational Education may be substituted for the requirement for the Advanced Regents Diploma, but the minimum requirement of one (1) foreign language credit must still be satisfied.)

JUNIOR HIGH SCHOOL FOREIGN LANGUAGE PROGRAM

In Wappingers, all students (except those classified students whose I.E.P.s exempt them), begin a foreign language in grade 7. With sufficient enrollment and availability of staff, grades 7 and 8 Language for Communication is offered in French, Italian and Spanish. This is a 2-year introductory Level I program. At the end of grade 8, students take a Foreign Language Proficiency Examination. Students who pass this exam are eligible to receive one unit of high school Regents credit. Grade 7 and grade 8 foreign language are the equivalent of a level I course.

All Foreign Language courses are full-year courses.

SPANISH 1

Code: L513 (9-12) (1 credit) (rank weight 1.0)
Prerequisite: None

This course is intended as a first experience in the target language and prepares students to meet the NYS Education Department’s Languages Other Than English (LOTE) Checkpoint A proficiency level. Students learn to speak and understand the language using basic vocabulary within the context of topics, and work with vocabulary lists, original dialogues, notes and letters related to the topics.

Areas of Study Include:

**TOPICS**
- Personal identification
- Family life
- Education
- House and home
- Leisure
- Shopping
- Community neighborhood
- Meal taking/food/drink
- Physical environment
- Travel
- Health and welfare

**FUNCTIONS**
- Culture
- Socializing
- Providing and obtaining information
- Expressing personal feelings
- Getting others to adopt a course of action (Persuasion)

**SITUATIONS**
- Listening
- Speaking
- Reading
- Writing

Assessment: A Department final exam will be administered in June. The final exam counts as 20% of the final course average. Passing this course meets the minimum graduation requirement in foreign language.

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see:

For a complete core curriculum for LOTE, see (especially pp. 12 – 19)
SECOND LANGUAGE

CULTURAL LANGUAGE
Code: L510 (10-12) (1 credit) (rank weight 1.0)
Prerequisite: None

This course is open to all students in grades 10-12 who lack the one credit language requirement for graduation, but who do NOT intend to pursue the 3 credit sequence in foreign language that is required for an advanced Regents diploma designation. This course is intended to prepare students to meet the NYS Education Department’s Languages Other Than English (LOTE) Checkpoint A proficiency level.

The Cultural Language course is an option for students who did not meet the New York State foreign language requirement at the junior high level. The goals of this course include:

- Compliance with NYSED foreign language requirements for graduation
- Meeting requirements of Checkpoint A proficiency
- Providing alternative instructional methods and strategies

Students who take this course will NOT be able to continue into Level 2 language without successful completion at Level 1. To be eligible, students enrolled must have completed the seat time requirement at Level 1 but were not eligible to earn credit for the graduation requirement. This is a voluntary option, and both students and parents need to be aware of the objectives and guidelines of the course before it is scheduled.

Areas of Study Include:
TOPICS
- Personal identification
- Family life
- Education
- House and home
- Leisure
- Shopping
- Community neighborhood
- Meal taking/food/drink
- Physical environment
- Travel
- Health and welfare
- Earning a living
- Public and private services
- Services - repairs
- Current events
- Culture

FUNCTIONS
- Socializing
- Providing and obtaining information
- Expressing personal feelings
- Getting others to adopt a course of action (Persuasion)

SITUATIONS
- Listening
- Speaking
- Reading
- Writing

Assessment: A teacher-created final exam or culminating project will be included and counted as 20% of the final course average. Passing this course meets the minimum graduation requirement in foreign language.

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see: http://www.emsc.nysed.gov/ciai/lorete/pub/lotelea.pdf

For a complete core curriculum for LOTE, see (especially pp. 12 – 19) http://emsc32.nysed.gov/guides/lote/part1.pdf

FRENCH 2
Code: L123

ITALIAN 2
Code: L323

SPANISH 2
Code: L523 (9-12) (1 credit) (rank weight 1.0)
Prerequisite: Must have passed the same foreign language in Grade 8 or Level 1.

In level 2, students move beyond the State Education Department’s LOTE Checkpoint A proficiency level and begin preparing in earnest for the District Final exam at the end of level 3 (Checkpoint B). Topics, functions and situations remain the same as in the previous level, but are approached in a broader and deeper manner. Expanding vocabulary and an increasing understanding of more complicated verb forms and grammatical concepts allow the students to communicate more effectively and understand the target language in authentic situations.

Areas of Study Include:
TOPICS
- Personal identification
- Family life
- Education
- House and home
- Leisure
- Shopping
- Community neighborhood
- Meal taking/food/drink
- Physical environment
- Travel
- Health and welfare
- Earning a living
- Public and private services
- Services - repairs
- Current events

FUNCTIONS
- Culture
- Socializing
- Providing and obtaining information
- Expressing personal feelings
- Getting others to adopt a course of action (Persuasion)

SITUATIONS
- Listening
- Speaking
- Reading
- Writing

Within the contexts of the topics, students will:
- Expand their vocabulary in the second language within the context of everyday situations
- Use grammatical structures which build upon those learned in prerequisite courses in order to express more complex thoughts and ideas
- Read and comprehend short stories and essays
- Socialize and carry on simple conversations in social situations relevant to young students
- Provide and obtain information in daily social interaction
- Express personal feelings
- Persuade others to act or not act in many different situations
- Write short essays and dialogues relevant to the above areas

Page 71
SECOND LANGUAGE

of study
• Listen to and comprehend the second language when spoken in authentic situations

Assessment: A Department final exam will be administered in June. The final exam counts as 20% of the final course average. Passing this course meets the minimum graduation requirement in foreign language.

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see:
For a complete core curriculum for LOTE, see (especially pp. 12–19) http://emsc32.nysed.gov/guides/lote/part1.pdf

FRENCH 3
Code: L133

ITALIAN 3
Code: L333

SPANISH 3
Code: L533  (9-12) (1 credit) (rank weight 1.0)
Prerequisite: Must have passed the same foreign language in Level 2.

This is the final course preparing students for NYS Education Department’s Checkpoint B proficiency (the District Final Exam). Topics, functions and situations remain the same as in the previous levels, but are approached in a broader and deeper manner. Expanding vocabulary and an increasing understanding of more complicated verb forms and grammatical concepts allow the students to communicate more effectively and understand the target language in authentic situations.

Areas of Study Include:

TOPICS
• Personal identification
• Family life
• Education
• House and home

• Leisure
• Shopping
• Community neighborhood
• Meal taking/food/drink
• Physical environment
• Travel
• Health and welfare
• Earning a living
• Public and private services
• Services - repairs
• Current events

FUNCTIONS
• Culture
• Socializing
• Providing and obtaining information
• Expressing personal feelings
• Getting others to adopt a course of action (Persuasion)

SITUATIONS
• Listening
• Speaking
• Reading
• Writing

Assessment: All students in this course level take the District Final exam in the foreign language in June. The District Final Exam is also the final exam for the course, which counts as 20% of the final course average. Students must pass this course and the District Final Exam in order to qualify for an Advanced Regents Diploma.

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see:
SECOND LANGUAGE

**FRENCH 4 - HONORS**
Code: L145

**ITALIAN 4 - HONORS/COLLEGE CREDIT**
Code: L345

**SPANISH 4 - HONORS**
Code: L545 (9-12) (1 credit) (rank weight 1.05)
Prerequisite: Must have passed the same foreign language in Level 3.

* This course is intended for the accelerated/honors student who is prepared to meet the rigorous academic demands of advanced placement work, as it is the first part of a two-year sequence that prepares students to meet the challenges of the College Board’s Advanced Placement exam at the end of Level 5. As an honors-level course, grades are weighted.

**Students of Italian 4 have the option of enrolling with SUNY Albany to receive four (4) credits for successful completion of the course (equivalent to SUNY Albany’s Intermediate Italian 1). There is a fee for students who wish to participate in this college program.

Areas of Study Include:
In accordance with Checkpoint C of the New York State Learning Standards for Languages Other than English (LOTE), throughout the course, students will:

- expand their ease in listening comprehension, in order to understand more readily native speakers as they present a variety of topics, in various situations
- refine and widen their own use of the spoken language as they interact with others to communicate their thoughts, needs and wants in the target language
- learn more advanced grammar in order to express deeper thoughts about topics of interest
- be exposed to the written language as found in contemporary media and in carefully-selected literary works
- be able to write reports that are factual and analytical as well as opinion-based essays
- continually develop an appreciation for the customs of the target culture as well as their artistic expression by learning about the creative arts, traditional and current music and the culture of cinema

Topics will include, but not be limited to:

- self and others
- family and interpersonal relations
- the community and societal customs
- education and preparing for the future
- jobs and professions; leisure

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

For more information on the Advanced Placement program, see: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see:

For a complete core curriculum for LOTE, see (especially pp. 12 – 19)

---

**FRENCH 5 - ADVANCED PLACEMENT**
Code: L156

**ITALIAN 5 - HONORS/COLLEGE CREDIT**
Code: L355

**ITALIAN 5 - ADVANCED PLACEMENT**
Code: L356

**SPANISH 5 - ADVANCED PLACEMENT**
Code: L556 (9-12) (1 credit) (rank weight 1.10)
Prerequisite: Must have passed the same foreign language in Level 4.

* This course is intended for the accelerated/honors student who is prepared to meet the rigorous academic demands of advanced placement work, as it is the final part of a two-year sequence that prepares students to meet the challenges of the College Board’s Advanced Placement exam. As an Advanced Placement-level course, grades are weighted.

**Students of Italian 5 have the option of enrolling with SUNY Albany to receive four (4) credits for successful completion of the course (equivalent to SUNY Albany’s Intermediate Italian 2). There is a fee for students who wish to participate in this college program.

Areas of Study Include:
In accordance with Checkpoint C of the New York State Learning Standards for Languages Other than English (LOTE), throughout the course, students will:

- continue to refine their listening comprehension skills as they learn to recognize nuances, subtleties and humor in the language of a native speaker
- be able to expand their own level of communication in the target language through the use of more specific vocabulary and idiomatic expressions
- be able to comprehend, synthesize, and appreciate the content of a variety of authentic print texts – from newspapers and magazines to contemporary short stories.
- be able to express feelings and opinions on a broad range of topics through the written and spoken form.

Topics will include, but not be limited to:

- the environment and ecological issues
- travel and cultural exchanges
- the work place
- societal roles and current events
- The US and the world community
- The country of the language studied

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

Students in this course are also expected to take the Advanced Placement exam in the applicable language in May. There is fee for this exam which is determined by the College Board and is the responsibility of the student.

In the event that a student does not take the AP exam, the student’s report card and transcript will reflect only a course in Honors.

For more information on the Advanced Placement program, see: http://apcentral.collegeboard.com/apc/public/courses/descriptions/index.html

For a complete review of the NYS Learning Standards for Languages Other Than English (LOTE), see:

For a complete core curriculum for LOTE, see (especially pp. 12 – 19)
All students are required by New York State to take four years of Social Studies in high school. Students must pass New York State Regents examinations in Global History & Geography and in United States History & Government in order to graduate.

Required courses are:
- Global History and Geography - Grades 9 and 10
- United States History and Government - Grade 11
- Economics and Participation in Government - Grade 12

Students may also elect to take the courses listed below. First priority is given to seniors. Except for AP World History, elective courses in Social Studies are generally not available to students in grade 9 or grade 10. However, if space allows, grade 10 students may be permitted to take an elective course, with the approval of the Department Director. Unless otherwise noted, electives are half-year courses.

- African Studies
- American Civil War
- AP Economics
- AP European History (full year)
- AP P.I.G./American Government
- AP World History (2 full years)
- Holocaust Studies
- Human Rights Issues
- Latin American Studies
- Law and the Individual
- Psychology
- Society and Culture
- World at War

Except for AP World History, elective courses in Social Studies are generally not available to students in grade 9 or grade 10. However, if space allows, grade 10 students may be permitted to take an elective course, with the approval of the Department Director. Unless otherwise noted, electives are half-year courses.

Electives are offered subject to sufficient enrollment and the availability of staff, and may not be available at both high schools.

- Students may not take more than one required Social Studies course in any given academic year except as noted herein. During their senior year, students who request permission from the District Social Studies Director to take United States History & Government and a required grade 12 Social Studies course simultaneously may be permitted to do so if they meet the following requirements:
  - the student would be eligible to graduate at the end of that year if both courses were completed successfully
  - the student must maintain passing grades for both courses.

At the end of the first and third quarters of instruction, when grades are reviewed, if the student is not passing both courses, s/he will be dropped from the higher level course, regardless of which course s/he is passing.

For a complete review of the NYS Social Studies Learning Standards see:
GLOBAL HISTORY & GEOGRAPHY I - REGENTS
Code: D347 Full Year (9) (1 credit) (rank weight 1.0)
Prerequisite: None

GLOBAL HISTORY & GEOGRAPHY I - HONORS
Code: D367 Full Year (9) (1 credit) (rank weight 1.05)
Prerequisite: 1. Completion of Grade 8 Honors Social Studies with a
final average of at least 85% or Grade 8 Regular Social Studies with
a final average of at least 90% and recommendation from teacher; or
2. Recommendation of the previous year’s Social Studies teacher.
NOTE: Honors classes generally incorporate more reading, writing and
discussion and at a higher level; use more challenging instructional
materials; and take more challenging tests throughout the year and a
different final exam.

GLOBAL HISTORY & GEOGRAPHY II - REGENTS
Code: D447 Full Year (10) (1 credit) (rank weight 1.0)
Prerequisite: Must have passed Global History & Geography I

GLOBAL HISTORY & GEOGRAPHY II - HONORS
Code: D467 Full Year (10) (1 credit) (rank weight 1.05)
Prerequisite: 1. Completion of Global History & Geography I Honors
with a final average of at least 85% or Global History & Geography I
Regents with a final average of at least 90%; and 2. Recommendation
of the previous year’s Social Studies teacher.
NOTE: Honors classes generally incorporate more reading, writing and
discussion and at a higher level; use more challenging instructional
materials; and take more challenging tests throughout the year.

The Global History and Geography core curriculum is a two-year program (grades 9 and 10) based on the five New York
State Social Studies Learning Standards. It is designed around
eight historical units and focuses on common themes that
recur across time and place.

Areas of Study Include:
GRADE 9
- Ancient World – Civilizations and Religions (4000 BCE/BC –
  500 CE/AD)
- Expanding Zones of Exchange and Encounter (500-1200)
- Global Interactions (1200-1650)
- The First Global Age (1450-1770)
GRADE 10
- An Age of Revolution (1750 - 1914)
- A Half-Century of Crisis and Achievement (1900 - 1945)
- The Twentieth Century Since 1945
- Global Connections and Interactions

This curriculum provides students with the opportunity to ex-
plore what is happening in various regions and civilizations at
a given time. In addition, it enables students to investigate is-
suues and themes from multiple perspectives and make global
connections and linkages that lead to in-depth understanding.
For each historical era, students will investigate global connec-
tions and linkages, including:
- Cultural Diffusion (Ideas/Technology/Food/Disease)
- Migrations
- Multi-Regional Empires
- Belief Systems
- Trade
- Conflict

Assessment: In Global I (grade 9), a Department final exam based on
the content, concepts and themes in this curriculum and modeled after
the NYS Global History and Geography Regents examination will be
administered in June. The final exam counts as 20% of the final course
average. Students must pass this course in order to graduate.

In Global II (grade 10), all students take the NYS Global His-
tory and Geography Regents examination in June based on
two years of material. The Regents exam is also the final exam
for the course and counts as 20% of the final course average.
Students must pass this course and the Global History and
Geography Regents exam in order to graduate.

For the complete NYS core curriculum for Global History and Geography, see:
http://www.p12.nysed.gov/ciai/socst/ssrg.html (pp. 89)

ADVANCED PLACEMENT WORLD HISTORY I
(HONORS)
Code: D377 Full Year (9) (1 credit) (rank weight 1.05)
Prerequisite: 1. Completion of Grade 8 Honors Social Studies with a
final average of at least 90% or Grade 8 Regular Social Studies with
a final average of at least 95% and recommendation from teacher; or
2. Recommendation of the previous year’s Social Studies teacher.
NOTE: This course replaces Global History and Geography I. This is
a college-level course. It is academically demanding and requires a
significant commitment on the part of the student.

ADVANCED PLACEMENT WORLD HISTORY II
Code: D477 Full Year (10) (1 credit) (rank weight 1.10)
Prerequisite: 1. Completion of Advanced Placement World History I
with a final average of at least 85%; and 2. Recommendation of
the previous year’s Social Studies teacher.
NOTE: This course replaces Global History and Geography II. This is
a college-level course. It is academically demanding and requires a
significant commitment on the part of the student.

Advanced Placement World History I/II is a two-year Advanced
Placement program (grades 9 and 10). The Advanced Place-
ment Program offers a course and exam in World History to
qualified students who wish to complete studies in secondary
school equivalent to an introductory college course in world
history. The purpose of this course is to develop greater under-
standing of the evolution of global processes and contacts in
interaction with different human societies. This understanding
is advanced through a combination of selective factual knowl-
dge and appropriate analytical skills. The course highlights
the nature of changes in international frameworks and their
causes and consequences, as well as comparisons among
major societies. It emphasizes relevant factual knowledge
used in conjunction with leading interpretive issues and types of
historical evidence.

Areas of Study Include:
Core topics begin with the Foundation period of prehistory
to 1000 CE, which will serve as the basis during the rest of
the program for a more in-depth study of global history and
civilization of the past 1,000 years. This course also covers the
material outlined in the course description for Global History
and Geography I and II.

Assessment: For Advanced Placement World History I, a Department
final exam based on the content, concepts and themes in this curriculum
and modeled after the World History Advanced Placement exam will be
administered in June. The final exam counts as 20% of the final course
average. Students must pass this course in order to graduate.

For Advanced Placement World History II, all students take the
NYS Global History and Geography Regents examination in
June. The Regents exam is also the final exam for the course
and counts as 20% of the final course average. Students

Page 75
must pass this course and the Global History and Geography Regents exam in order to graduate. Students in this course are also expected to take the Advanced Placement World History exam in May. There is fee for this exam which is determined by the College Board and is the responsibility of the student.

For more information about the Advanced Placement curriculum, see: http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/4484.html

For the complete NYS core curriculum for Global History and Geography, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html (pp. 89-120)

GLOBAL HISTORY (AIS) - REGENTS PREP
Code: D401 First Semester
   D402 Second Semester
(10-12) (no credit)

Academic Intervention Services (AIS) are mandated for students who have failed the Global History Regents exam. Students will be assigned to the course either five days a week or on an every other day basis. The student remains in the course until he/she passes the required Regents exam.

UNITED STATES HISTORY & GOVERNMENT
- REGENTS
Code: D547 Full Year (11) (1 credit) (rank weight 1.0)
Prerequisite: Must have passed Global History and Geography II

UNITED STATES HISTORY & GOVERNMENT
- HONORS
Code: D567 Full Year (11) (1 credit) (rank weight 1.05)
Prerequisite: 1. Completion of Global History and Geography II Honors or Advanced Placement World History II with a final average of at least 85%, or Global History and Geography II Regents with a final average of at least 90% and recommendation from teacher; or 2. Recommendation of the previous year’s Social Studies teacher.

NOTE: Honors classes generally incorporate more reading, writing and discussion and at a higher level; use more challenging instructional materials; and take more challenging tests throughout the year.

The United States History and Government core curriculum is organized into seven historical units based on the five New York State Learning Standards. It covers the history of this great experiment in representative democracy, while emphasizing government and basic constitutional principals so that students can take on their roles as citizens.

Areas of Study Include:
• Geography
• Constitutional Foundations
• Industrializations of the United States
• The Progressive Movement
• At Home and Abroad: Prosperity and Depression
• The United States in an Age of Global Crisis: Responsibility and Cooperation
• A World in Uncertain Times: 1950 to the Present

Assessment: All students take the NYS United States History and Government Regents examination in June. The Regents exam is also the final exam for the course and counts as 20% of the final course average. Students must pass this course and the United States History and Government Regents exam in order to graduate.

For the complete NYS core curriculum for United States History and Government, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html (pp. 121-155)

ADVANCED PLACEMENT UNITED STATES HISTORY
Code: D587 Full Year (11) (1 credit) (rank weight 1.10)
Prerequisite: 1. Completion of Advanced Placement World History II with a final average of at least 95%, or Global History and Geography II Regents with a final average of at least 90%, or Global History and Geography II Regents with a final average of at least 95%; and 2. Recommendation of the previous year’s Social Studies teacher.

NOTE: This course replaces U. S. History and Government. This is a college-level course. It is academically demanding and requires a significant commitment on the part of the student.

The AP program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials - their relevance to a given interpretive problem, their reliability, and their importance - and to weigh the evidence and interpretations presented in historical scholarship. This course develops 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.

Areas of Study Include:
See the course description for U. S. History and Government.

Assessment: All students take the NYS U. S. History and Government Regents examination in June. The Regents exam is also the final exam for the course and counts as 20% of the final course average. Students must pass this course and the United States History and Government Regents exam in order to graduate. Students in this course are also expected to take the Advanced Placement U. S. History exam in May. There is fee for this exam which is determined by the College Board and is the responsibility of the student.

For more information about the Advanced Placement curriculum, see: http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/3501.html

For the complete NYS core curriculum for United States History and Government, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html (pp. 121-155)

PARTICIPATION IN GOVERNMENT
Code: D605 Half-Year (12) (½ credit) (rank weight 1.0)
Prerequisite: Must have passed United States History and Government

Students studying participation in government in grade 12 should experience a culminating course that relates the content and skills of the entire social studies curriculum throughout the previous school years to the individual student’s obligation and ability to act as a responsible citizen.

Areas of Study Include:
• Interaction between citizens and government
• Analysis of current political issues
• Participation in the United States political system
• Comparison/contrast concept of justice in societies
• Criminal and civil justice systems
• Key court decisions at various levels

Learning activities include:
• Oral presentations
• Research of issues
• Community service

Assessment: Students are required to complete ten hours of community
Areas of Study Include:
• Constitutional Underpinnings of United States Government
• Political Beliefs and Behaviors
• Political Parties, Interest Groups, and Mass Media
• Institutions of National Government: The Congress, the Presidency, the Bureaucracy, and the Federal Courts
• Public Policy
• Civil Rights and Civil Liberties

Assessment: Students are required to complete ten hours of community service for this course. In addition, a teacher-created final exam or culminating project will be included and counted as 20% of the final course average. Students must pass this course in order to graduate.

For the complete NYS core curriculum for Participation in Government, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html

ADVANCED PLACEMENT PARTICIPATION IN GOVERNMENT (AP UNITED STATES GOVERNMENT & POLITICS)
Code: D700 Half-Year (12) (% credit) (rank weight 1.10)
Prerequisite: 1. Completion of United States History and Government Honors or Advanced Placement U. S. History with a final average of at least 85%, or United States History and Government Regents with a final average of at least 90%; and 2. Recommendation of the previous year’s Social Studies teacher.

NOTE: This course replaces Participation in Government. This is a college-level course. It is academically demanding and requires a significant commitment on the part of the student.

The AP United States Government & Politics course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret United States politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute United States political reality.

Areas of Study Include:
• Basic Economic Concepts
• The Nature and Functions of Product Markets
• Factor Markets
• Market Failure and the Role of Government

Assessment: Students take a final exam based on the content, concepts and themes in this curriculum project at the end of the semester. The final exam counts as 20% of the final course average. Students must pass this course in order to graduate.

For more information about the Advanced Placement curriculum, see: http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2121.html

For the complete NYS core curriculum for Participation in Government, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html

ADVANCED PLACEMENT ECONOMICS (AP MICROECONOMICS)
Code: D650 Half-Year (12) (% credit) (rank weight 1.10)
Prerequisite: 1. Completion of United States History and Government Honors or Advanced Placement U. S. History with a final average of at least 85%, or United States History and Government Regents with a final average of at least 90%; and 2. Recommendation of the previous year’s Social Studies teacher.

NOTE: This course replaces Economics. This is a college-level course. It is academically demanding and requires a significant commitment on the part of the student.

The purpose of this AP course in Microeconomics is to provide a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the larger economic system. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. General topics include:

Areas of Study Include:
• Basic Economic Concepts
• The Nature and Functions of Product Markets
• Factor Markets
• Market Failure and the Role of Government

Assessment: Students take a final exam based on the content, concepts and themes in this curriculum project at the end of the semester. The final exam counts as 20% of the final course average. Students must pass this course in order to graduate.

For more information about the Advanced Placement curriculum, see: http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/2121.html

For the complete NYS core curriculum for Economics, see: http://www.p12.nysed.gov/ciai/socst/ssrg.html

MACRO/MICRO
D649 AP Macro/Micro - One year course (1 credit) (rank weight 1.10)
Prerequisite Course: US History

This course is a college level course were students will learn complex models and apply them to real work scenarios. Students who are interested in the field of business would benefit from taking this course. Student can obtain college credit. The Syllabus for this course is aligned with College Board standards for the course.


ELECTIVES
NOTE: Unless otherwise noted, electives are half-year courses. Electives are offered subject to sufficient enrollment and the availability of staff, and may not be offered each semester or at both high schools.


**AFRICAN STUDIES**

Code: D785  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None

This course will deal with the history, people, politics, culture, economy, geography and current events of Africa. It will expand the students’ basic knowledge of the African continent and its countries beyond the framework and level of mastery established in Global History and Geography. This course will broaden the students’ perspective and understanding regarding Africa. At the conclusion of the course, students will be able to think critically about Africa, demonstrate knowledge of the region and reflect an in-depth understanding of major issues related to Africa. The course will include group study and discussion, focus films, guest speakers, fictional and non-fictional literary works, lecture and research.

Areas of Study Include:
- **Geography of the African Continent**
- **Early history and society**
- **European contact/the scramble for Africa**
- **African slave trade**
- **Modern Africa: politics, economics, international relations**

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

**AMERICAN CIVIL WAR**

Code: D760  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None

The purpose of this course is to offer students the opportunity to examine the issues, personalities and the legacy of this single-most important event in American history. The course will attempt to help students understand the magnitude of the issues, the degree of personal sacrifice, and the war’s subsequent impact in shaping the modern American nation.

Areas of Study Include:
- **Causes of the war**
- **Major events and battles as the war unfolds**
- **The issues and personalities of the war**
- **The legacy of the conflict**

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

**EUROPEAN HISTORY - ADVANCED PLACEMENT**

Code: D780  Full Year (11-12) (1 credit)  (rank weight 1.10)
Prerequisite: 1. Completion of previous year’s Honors or Advanced Placement Social Studies course with a final average of at least 85%, or a Regents-level course with a final average of at least 90%; and 2. Recommendation of the previous year’s Social Studies teacher.

NOTE: This is a college-level course. It is academically demanding and requires a significant commitment on the part of the student.

The study of European history since 1450 introduces students to cultural, economic, political and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

Areas of Study Include:
- **Movement of European history from the Renaissance to the present**
- **Political, social and economic conflicts of this era**
- **Intellectual background**
- **Artistic, literary, economic and philosophical movements**
- **Analyzing historical documents**
- **Developing an awareness of the many influences forming history**

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

Students in this course are also expected to take the Advanced Placement European History exam in May. There is fee for this exam which is determined by the College Board and is the responsibility of the student.

In the event that a student does not take the AP exam, the student’s report card and transcript will reflect only a course in Honors.

For a complete review of the NYS Social Studies Learning Standards, see:  

For more information about the Advanced Placement curriculum, see:  

**HOLOCAUST STUDIES**

Code: D782  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None

This course will deal with the uniqueness and universality of this momentous event in history. It will examine the causes and events of the Holocaust, as well as its effect on the course of humanity. The course will begin with a history of the Jews and early examples of anti-Semitism and conclude with current issues in the Middle East, utilizing historical readings, fictional accounts, films and guest speakers.

Areas of Study Include:
- **Defining the Holocaust and the reasons for studying it**
- **Anti-Semitism before, during and after Hitler’s time in power**
- **The foreign reaction to the Holocaust**
- **The legacy of the Holocaust**
- **The Middle East today**

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

**HUMAN RIGHTS ISSUES**

Code: D784  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None

This course will deal with the struggle of all people to achieve and maintain human rights. Students will study various documents of human rights, violations of human rights and hate groups which attempt to curtail human rights. Particular emphasis will be given to events and documents relating to the history of the United States. The class will include projects that help teach tolerance and respect for all people. Focus films, guest speakers and fictional and non-fictional literary works will be included.

Areas of Study Include:
- **The history of Human Rights theory**
- **The Universal Declaration of Human Rights**
- **The contemporary Human Rights movement**
- **Contemporary Human Rights issues**

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

For more information about the Advanced Placement curriculum, see:  

**Recommended Placement**

For more information about the Advanced Placement curriculum, see:  
LATIN AMERICAN STUDIES
Code: D783  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None
This course will focus on the history, people, politics, culture, economy, geography and current events of Latin America, Central America, South America and the Caribbean. It will expand the students' basic knowledge of Central and South America beyond the framework and level of mastery established in Global History and Geography, and broaden the students' perspective and understanding regarding this region. The course will include group study and discussion, focus films, guest speakers, fictional and non-fictional literary works, lecture and research. At the conclusion of the course, students will be able to think critically about Latin America, demonstrate knowledge of the region and reflect an in-depth understanding of major issues related to Latin America.
Areas of Study Include:
• Geography
• Traditional People: Mpyuran-Arawaks, Tupi-Guarani, Yanomami, Kayapo, Olmec, Toltec, Maya, Aztec, Inca.
• Colonization
• Slave Trade
• Nationalism and Revolutions, Liberalism vs. Conservatism - Haiti, Colombia, Brazil, Mexico, Cuba
• United States Imperialism - Relations, "Paternalistic Neglect"
• Country Case Studies in the 20th Century: Brazil, Mexico, Cuba, Guatemala, Chile, et al.
• Cold War and Latin America
• Women's Issues
• Contemporary Issues
Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

LAW AND THE INDIVIDUAL
Code: D710  Half-Year (9-12) (½ credit)  (rank weight 1.0)
Prerequisite: None
This course is designed to provide students with a general understanding of their legal rights and responsibilities and knowledge of daily legal problems faced in society. The course will examine the purposes and origins of law using both criminal and civil law. A variety of other laws will be discussed, including individual rights and freedoms, family law and consumer law. There will be extensive use of current events and issues.
Areas of Study Include:
• Introduction to law and legal systems
• Individual rights and responsibilities
• Criminal law and judicial procedure
• Civil law
• Family law
• Consumer law
• Tort law
Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

PHILOSOPHY: A HISTORY OF THOUGHT
Code: D786  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None
This course serves as an introductory level philosophy course. Presented are many philosophical traditions and theories from a myriad of global perspectives. Students will learn about the role of thought, inquiry, ideas, modalities of discourse, and the practical application of philosophical theories.
Areas of Study Include:
• Introduction to psychology, the study of human nature
• Personality development
• Behavior disorders
• The nature of consciousness
• Growth and development
• Understanding intelligence
• How people learn
• The individual and society
Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

PSYCHOLOGY
Code: D720  Half-Year (11-12) (½ credit)  (rank weight 1.0)
Prerequisite: None
This is a general survey course designed to provide students with an understanding of the basic concepts and techniques of modern psychology. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others. Each student will be expected to contribute to class discussions and to suggest projects and topics for study.
Areas of Study Include:
• Development of Philosophical Ideas in Different Regions of the World
• Development of Philosophical Ideas Across Time Periods
• Global Philosophical Traditions and Theories
Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

D.C.C. PSYCHOLOGY
Code: D722  Half-Year (12) (½ credit)  (rank weight 1.10)
Prerequisite: 85% overall average and college bound senior
Emphasis in this course is on major aspects of human behavior and adaptation to the environment. Topics include learning, motivation, emotional behavior, maturation, personality, behavior disorders, and therapies. Course Student Learning Outcomes: 1. Apply psychological concepts, theories, and research to everyday life. 2. Identify and evaluate the sources, context, and credibility of psychological claims using scientific principles.
Course Student Learning Outcomes:
1. Introduction to Psychology
   • A consideration of the relationship of Psychology to other disciplines.
   • A survey of the methods employed in research and in the design of experiments
   • An overview of the historical antecedents and major schools of thought that have influenced contemporary psychology.
   • An introduction to the physiological mechanisms of the nervous system as they affect psychological functions.
   • The nature of consciousness
   • Growth and development
   • Understanding intelligence
   • How people learn
   • The individual and society
2. Principles of Learning
   • The importance of behavior consequences.
   • The basic descriptions and distinctions between Classical and Operant conditioning and the technical terms relating to each.
   • The concept of reinforcement, the types, the characteristic schedules, and their effects on extinction.
   • The difference between Punishment and Negative Reinforcement.
   • The difference between Escape and Avoidance Conditioning.
   • The basic notion of biological feedback control, including an exploration of its application and implications.
Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.
3. Maturation and Development
- An examination of the Nature-Nurture issue.
- The perspectives of continuity of development versus stage theories and of stability versus change in the developmental process.
- The importance of developmental experiences throughout the lifespan as they affect the developing individual.
- The unfolding and maturation of gender and human sexuality over time.

4. Motivation and Emotion
- Consideration of the nature of motives, their manifestations and classification.
- Coverage of the theoretical explanations for the expression of emotions with their various emphases.
- Focus on the applied behavioral aspects of emotion and the relationship which exists with motivated states.

5. Personality
- The operational definition of personality as a composite of varied influences.
- A survey of several major explanations of personality development and their attempts to account for functioning behavior.
- The varied measuring devices used in personality assessment.

6. Psychopathology and Treatment
- The dynamics of stress and its relation to health and well-being.
- A survey of the defense mechanisms and the ways in which defensive behavior contrasts with task-oriented behavior.
- A consideration of the continuum of behavior, ranging from minor maladjustments through psychotic reactions, and personality disorders.
- The major types of conflict situations.
- The notion of normality.
- A survey of the major therapeutic approaches.

Assessment: Research paper and Final exam

Note: Successful completion of DCC D722 with a grade of C or higher will earn students three college credits


SOCIETY AND CULTURE IN TWENTIETH CENTURY AMERICA
Code: D770 Half-Year (1/2 credit) (rank weight: 1.0)
Prerequisite: None

The goal of this course is to assess the major developments which shaped the social and cultural values of the American people in the twentieth century. This is a course in social history that examines the way ordinary Americans lived and what they believed as reflected in their music, art, literature and popular institutions. To gain a better understanding of what it means to be an American today, we will examine how previous generations of Americans went about their daily lives and what was important to them.

Areas of Study Include:
- Fundamental trends in modern American life from the early 1900s to the present
- People in relation to culture and social organizations
- Family, religion, education
- American culture as expressed in art, literature, film and music
- Social change, social problems

Assessment: A teacher-created final exam, term paper or culminating project will be included and counted as 20% of the final course average.

HISTORY THROUGH FILM
Code: D787 Half-Year (1/2 credit) (rank weight: 1.0)
Prerequisite: NONE
Targeted Grade Level: 11-12

Students will learn about the history of film as an art form and become knowledgeable about the techniques, film styles, genres, creative talent and the industry itself. Students will examine how the medium of film has changed with the times and adapted to the technological and cultural changes that show how movies were catalysts for social movements/change. Students will learn about the techniques and vocabulary needed to examine films with a critical and analytical eye. The films will serve as both primary sources and in some cases, evidence for students to support their point of view/opinions and perspective. This course will also teach students how to use film in an intelligent and thought provoking way in order to write a persuasive/position essay or articulate an argument with supporting evidence.
The Wappingers Central School District has a commitment to provide a comprehensive education for all students. In keeping with this commitment, the District provides a continuum of special education services to those students who have been identified by the Committee on Special Education as students with disabilities. Services provided may include related services, consultant teacher, resource room, integrated co-teaching, and special classes. The program and services are specified in the student’s Individualized Education Program. The instructional program for the majority of classified students is based on the same instructional objectives as the general education program. Necessary modifications in materials, curriculum, teaching strategies, and grading are made as appropriate. Supplementary aids and services are also used as per each student’s Individualized Education Program (IEP) to allow access to regular education curriculum in the least restrictive environment.

Special Education students may be eligible to earn Regents, Advanced Regents, Local Diploma, or a Career Development and Occupational Studies Credential. For a very small percentage of alternatively assessed students, a Skills and Achievement Commencement Credential (SACC) may be awarded. The appropriate diploma option is determined through transition planning and the Committee on Special Education (CSE) review process.

**Indirect Consultant Teacher**
Indirect consultant teacher services are consultation provided by a special education teacher to regular education teachers to assist them in adjusting the learning environment and/or modifying their instructional methods to meet the individual needs of a student with a disability who attends their classes.

**Direct Consultant Teacher**
Specially designed instruction provided to an individual student with a disability or a group of students with disabilities by a special education teacher to aid the student(s) to benefit the general education class instruction.

**Resource Room**
Resource room is specialized supplementary instruction in a small group setting for a portion of the school day.

**Integrated Co-Teaching**
Integrated co-teaching is the provision of specially designed instruction and academic instruction provided to a group of students with disabilities and non-disabled students.

**Special Class**
Special class provide students with the opportunity of specially designed individualized or group instruction. The classes consist of students with educational disabilities and similar needs.

**Special class programs may include:**

- Special Classes with Regents content and Regents examinations, for students who are working toward a Regents diploma. Special classes address specific content areas;
- Special Class Intensive Instruction (Levels 1 & 2): Students explore vocational opportunities while working towards the Skills and Achievement Commencement Credential (SACC). Students in these classes will take the NY State Alternative Assessment exams;
- Special Class Intensive Instruction (Levels 3 & 4) Students explore vocational opportunities while working towards the Career Development Occupational Studies Commencement Credential (CDOS). Students in these classes will take NY State Regents examinations, and exit with a Regents or local diploma with a CDOS credential, or with a CDOS credential as a stand-alone credential.
At Wappingers Central School District, we offer a unique one of a kind cutting edge program in the field of Technology & Engineering. We have a class for every student where they have an opportunity to learn about tomorrow’s technology today!

Our program is split into three categories: Engineering Design, Computer Design, and Industrial/Traditional Design courses. Our Engineering Design courses are part of an accredited Project Lead the Way (PLTW) program, where students could earn up to 30 credit hours through our partner school, Rochester Institute of Technology (RIT).

**COMPUTER DESIGN COURSES**

**COMMUNICATIONS SYSTEMS**  
Course Code: T6710 & I100  
Prerequisites: None  
Semester Offered: Fall and Spring (T6710 half-year, I100 full-year)  
Ranking Weight: 1.00  
Recommended Grade: 9-12  
College Credit: None  
Other: I100 (full-year) Course Fulfills the New York State Art/Music Graduation Requirement.  
COURSE DESCRIPTION: SIA/COMMUNICATION SYSTEMS (T6710)  
Communication Systems is a HALF YEAR, half credit course, taught by the Department of Technology. Students learn about the different systems of communications including, audio, audio/visual, visual, and electronic. Students will use various Communication Technology Equipment including mixing boards, video cameras, Apple Computers, and other video production equipment. Students’ work will be displayed on MSG Varsity Network.  
COURSE DESCRIPTION: SIA/COMMUNICATION SYSTEMS (I100)  
Communication Systems is a FULL YEAR, full credit course, taught by the Department of Technology in conjunction with the Art Department (Studio-In-Art). Upon completion of both Communication Systems and Studio-In-Art, students will receive credit in Technology and Art. Student’s NYS Regents Art/Music requirement will be fulfilled.

**COMPUTER GRAPHICS**  
Course Code: T743  
Prerequisites: None  
Semester Offered: Half Year - 1/2 Credit  
Ranking Weight: 1.00  
Recommended Grades: 9-12  
College Credit: No  
COURSE DESCRIPTION:  
This intermediate design and visual communications course will provide an overview of graphic design, digital photography, and animation. Software used includes: Adobe Photoshop, Illustrator, InDesign, and Flash. Skills developed in the course are a necessary foundation for success in Web Design and Development. Students will develop computer vocabulary related to concepts, aesthetics, and technical skills related to computer graphic technology. Students utilize official Adobe training materials which make them eligible to take Adobe Certification Exams (ACE).  

**WEB DESIGN AND ANIMATION**  
Course Code: T742  
Prerequisites: Successful Completion of Computer Graphics  
Semester Offered: Spring Half Year - 1/2 Credit  
Ranking Weight: 1.00  
Recommended Grades: 9-12  
College Credit: No  
COURSE DESCRIPTION:  
This course is a continuation of Computer Graphics. students will broaden their skills in Adobe Illustrator, Photoshop, and Flash to complete projects using Dreamweaver. Students will utilize the graphic design process to create both professional and personal websites. Students will gain knowledge in the areas of basic computer programming, design, and site maintenance/management while understanding the theory and history of Web Design. Students utilize official Adobe training material, which make them eligible to take Adobe Certification Exams (ACE).  

Computer Aided Design (CAD)  
Course Code: T745  
Prerequisites: Technical Drawing  
Recommended Grades: 9-12  
College Credit: No  
COURSE DESCRIPTION:  
Computer Aided Design is a half year, half credit course designed to acquaint the student with hands-on activities using a PC platform workstation. Students will exercise a variety of drafting and design software tools using CAD to produce both two and three-dimensional drawings and illustrations. Drawings will be produced by students of their own designs as well as assigned exercises. Drawings will be electronically saved, printed and/or plotted for evaluation.
INDUSTRIAL ARTS

MATERIALS PROCESSING: WOODS
Course Code: T753
Prerequisites: None
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description:
Woods Processes and Fabrication is an introduction to woods technology including materials, processes, tools, and equipment. The half year course includes fundamental manipulative work in selection, planning, cutting, forming, assembling, and finishing a variety of wood products. Students are instructed on many machinist tools and utilize many different combining techniques to form a well-rounded experience that will be an asset in any future work in the technology field or even for the home hobbyist.

MATERIALS PROCESSING: ADVANCED WOODS
Course Code: T754
Prerequisites: Materials Processing: Woods
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description:
Advanced woodworking is a half year course for students taking the basic woodworking class to the next level. Students will be using more advanced machinery and completing projects that entail more thought and detail while still demonstrating proper safety measures.

MATERIALS PROCESSING: METALS
Course Code: T759
Prerequisites: None
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description:
Metals Processes and Fabrication is an introduction to metals technology including materials, processes, tools, and equipment. The half year course includes fundamental manipulative work in selection, planning, cutting, forming, assembling, and finishing a variety of metal products. Students work with ferrous and nonferrous metals and learn how industry uses these materials to construct structures and tools that are essential in our technological society. Students are instructed on many machinist tools and utilize many different combining techniques to form a well-rounded experience that will be an asset in any future work in the technology field or even for the home hobbyist.

CONSTRUCTION SYSTEMS

Course Code: T723
Prerequisites: None
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: .5
Recommended Grades: 9-12
College Credit: No

Course Description:
Construction Systems is a ½-unit, twenty-week course offered to all students. Construction Systems explores how mankind shapes the world using current technology to provide solutions for society’s needs. This course will explore the four fields of construction- Light Construction, Commercial Construction, Industrial Construction, and Civil Construction. Seventy-five percent of the course time will be spent on hands-on activities in a laboratory setting. Lab activities will center on the most common construction activities found in Light and Commercial Construction. Careers within the construction trades will be explored throughout the course. Personal safety, energy use, conservation, and environmental issues are addressed as related to all fields of construction.

TRANSPORTATION SYSTEMS

Course Code: T720
Prerequisites: None
Semester Offered: Full Year – 1 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description:
Transportation systems is a course that will acquaint students with a range of methods used to move people, materials, and products, across the land, sea and air. The study of these systems will be the main focus of the course. The theory of operation and the scientific principles of the transportation systems will be included. The course is a full year for one period each day. The lab work will consist of 20 or more instructional topics and 60-70 lab periods for student activity. Such lab activities will include construction of model cars, planes, rockets, and boats. Students will also experiment with internal combustion engines that are used to power our transportation systems, as well as auto repair and maintenance.

BASIC ELECTRICITY/ELECTRONICS

Course Code: T725
Prerequisites: None
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description:
Basic Electronics and Electricity provides students with a background in electronics and electricity principles. Many activities involve Energy Electronics and the use of Innovative Green Electronic Technology systems. Students will also participate in household wiring projects such as wiring up a room in a house, garage door openers, “Clap on Clap off” circuits, and solar panels.
TECHNICAL DRAWING AND DRAFTING
Course Code: T735
Prerequisites: None
Semester Offered: Half Year - 1/2 Credit
Ranking Weight: 1.00
Recommended Grades: 9-12
College Credit: No

Course Description
In this foundation course, students learn the basic language of technical design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. Technical Drawing introduces students to the profession of drafting. Students gain skills and knowledge in freehand sketching, lettering, and dimensioning. Students then apply their drafting skills in creating drawings in the engineering.

MANUFACTURING
Course Code: T760
Prerequisites: Any 2 Technology Courses
Semester Offered: Full Year – 1 Credit
Ranking Weight: 1.00
Recommended Grades: 11-12
College Credit: No

Course Description
Through the use of the computer lab, work shop, and metals shop, students will design and create projects using various manufacturing techniques to replicate an assembly line style environment where each student or group of students are responsible for design and operating a particular step in the process. Students will have direct access to the department’s CNC routers, plasma cutters, and milling machines in each of the workshops. It is recommended that students have taken MP Woods and Metals before enrolling in this course.
PROJECT LEAD THE WAY (PLTW)

Project Lead The Way (PLTW) is a national accredited engineering program offered at John Jay High School. The John Jay Department of Technology & Engineering is certified and offers college credit from the Rochester Institute of Technology (R.I.T). We also offer advanced weighting for most of our PLTW courses.

PLTW DESIGN AND DRAWING FOR PRODUCTION (DDP)
Course Code: T750
Prerequisites: 75% or Higher in Math 8
Semester Offered: Full Year - 1 Credit
Ranking Weight: 1.00
Recommended Grades: 9 & 10
College Credit: Yes - R.I.T. (6 Hours)
Other: This Course Fulfills the New York State Art/Music Graduation Requirement.

Course Description:
Design and Drawing for Production is a course in the Project Lead the Way Program at John Jay that teaches students how to take an idea through a design process that will eventually be manufactured or produced. As you learn about various aspects of engineering and engineering design, such as how engineers communicate through drawing, you will apply what you learn through various activities, projects, and problems. For example, after learning about the different techniques engineers use in determining how to design a product, students will have the flexibility to explore the design and engineering processes to solve problems that are of their own interest. Students who meet certain requirements may also receive college credits through Rochester Institute of Technology at the end of the course.

PLTW PRINCIPLES OF ENGINEERING (POE)
Course Code: T773
Prerequisites: 75% or Higher in Math 8
Semester Offered: Full Year - 1 Credit
Ranking Weight: 1.04
Recommended Grades: 10-12
College Credit: Yes - R.I.T. (6 Hours)

Course Description:
This survey course of engineering exposes students to some of the major concepts they’ll encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community. This course is designed for 10th or 11th grade students.

PLTW CIVIL ENGINEERING & ARCHITECTURE (CEA)
Course Code: T774
Prerequisites: 75% or Higher in Math 8
Semester Offered: Full Year - 1 Credit
Ranking Weight: 1.04
Recommended Grades: 10-12
College Credit: Yes - R.I.T. (6 Hours)

Course Description:
The major focus of this course is completing long-term projects that involve the development of property sites. As students learn about various aspects of civil engineering and architecture, they apply what they learn to the design and development of a property. The course provides teachers and students freedom to develop the property as a simulation or to students to model the experiences that civil engineers and architects face. Students work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture.

PLTW DIGITAL ELECTRONICS (DE)
Course Code: T771
Prerequisites: 75% or Higher in Math 8
Semester Offered: Full Year - 1 Credit
Ranking Weight: 1.04
Recommended Grades: 10 & 11
College Credit: Yes - R.I.T. (6 Hours)

Course Description:
This course is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, and high-definition televisions. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.
PLTW ENGINEERING DESIGN & DEVELOPMENT (EDD)

Course Code: T775
Prerequisites: Two completed PLTW courses
Recommendation: Advanced Math or Science Course
Semester Offered: Full Year - 1 Credit
Ranking Weight: 1.04
Recommended Grades: 11 & 12
College Credit: None

Course Description:
This capstone course allows students to design a solution to a technical problem of their choosing. They have the chance to eliminate one of the “Don’t you hate it when…” statements of the world. This is an engineering research course in which students will work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide and help the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. The EDD course allows students to apply all the skills and knowledge learned in previous Project Lead The Way courses. The use of 3D design software helps students design solutions to the problem their team has chosen. This course also engages students in time management and teamwork skills, a valuable asset to students in the future.
Please note that CTI Courses are not currently National Collegiate Athletic Association (NCAA) approved.

* INDICATES NEW COURSES OFFERINGS FOR 2019-2020

**Career Exploration**

**Career Exploratory Program**
This course is geared for students in 10th and/or 11th grade who are classified with disabilities pursuing a Regents Diploma or CDOS Credential. Students will be given a foundation in career skills and will explore a number of career options. Additional services include career counseling, career research and work based learning opportunities. Upon successful completion, students may enter CTE programming.

**Agriculture**

**Small Engine Technology I & II** - This program offers students entry level skills in small engine operation, maintenance, and repair. Second year students will focus on the operation, maintenance, and repair of lawn/garden equipment and recreational vehicles. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Careers in Animal & Plant Sciences (PM)** - Students will develop an understanding of the diverse and profitable fields of Agriculture. A variety of topics are covered including plant and animal biology and technology, food science and safety, wildlife management and environmental conservation, agricultural research, college and career exploration. This program emphasizes hands-on experiences with on-site projects, guest visitors, work placements and related field trips to businesses, organizations, colleges and industry events. Students have the option of choosing the animal or plant track in their second year.

**Architecture & Construction**

**Construction Trades I & II** - This program includes coursework in building construction, finish carpentry, masonry, plumbing and basic electricity. Students will be introduced to the tools, methods, and skills needed to gain entry level employment in the construction industry. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Electrical Construction Technology I & II** - This program provides students entry level skills in construction electricity. Courses emphasize job safety, electrical theory, electrical calculations, work ethic, proper tool use and exposure to professional opportunities within the trade. First year focus is on residential installations, followed by second year directed at commercial and industrial installations. Students who successfully complete courses I and II will be eligible for one unit of Math credit and one unit of Science credit. Students must provide hand tools and code book.

**Welding I & II** - This program will help students develop entry level skills needed for careers in the welding and steel fabrication industry.

**Arts, Technology & Communication**

**Graphic Design I & II** - Students will be given the opportunity to explore the exciting world of Graphic Arts, Graphic Design, and Multi-Media Arts. Students enrolled in this program will develop skills and workplace competencies while exploring the many facets of communication careers. Students use a hands-on learning approach where the emphasis is placed on problem solving skills and communication techniques and processes.

**Film Production I & II** - This course is an introduction to the field of film and video production. It familiarizes students with the basic principles, theories and techniques in video production. Students will construct storyboards, write scripts, direct shoots, and edit their own projects using equipment provided by the CTI.

**Education**

**Early Childhood Education I** - This program provides students with an understanding of the physical, social and mental development of children ages birth to eight. Students will participate in off-site classroom internships.

**Early Childhood Education II** - This program prepares students to work under the general supervision of a licensed Teacher. Students will cover a range of topics related to pedagogy. Early Childhood Education is recommended prior to Early Childhood Education II. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Health Sciences**

**Introduction to Health Occupations** - This one-year course is recommended during the student’s junior year and includes core competencies specific to the Health Occupations. Students will be given an opportunity to explore various health care fields. Introduction to Health Occupations is strongly recommended before taking the Nursing Assistant (CNA) course. Second year options include Nursing Assistant or Practical Nursing 1. Requirements for PN1 HS are: a 98% average, strong work ethic and no more than three absences in order for recommendation to take the entrance exam for the program.
**Nursing Assistant** - This one-year course for seniors introduces the student to the foundation skills necessary for the study of Nursing. Successful students qualify to take the CNA exam. Successful completion satisfies health requirement for high school graduation. Students completing the program are eligible for one unit of science credit. No academic pullouts available for this course. Important Notes: Introduction to Health Occupations is strongly recommended before taking Nursing Assistant; work maturity skills essential to success in the Nursing Assistant program.

**Practical Nursing I** - Open to seniors who have completed 3 Regents science courses, including Living Environment. Admission test required. To be considered, students must have a 98% average in Introduction to Health Occupations, demonstrate excellent attendance and work ethic, and obtain teacher recommendation. No academic pullouts available for this course.

**Hospitality & Tourism**

**Culinary Arts /Restaurant Management I & II** - This program for juniors and/or seniors introduces the student to skills in food preparation, baking and pastry arts, safety and sanitation, and culinary hospitality. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Human Services**

**Cosmetology I & II** - This is a two-year program. Students learn the care of hair, nails and skin. Students completing both years of the program are eligible for one unit of Science credit. Good attendance is essential. Students who successfully complete the program with at least 1000 hours are eligible to take the New York State cosmetology license exam. No academic pullouts are available for this class. Successful completion of this program will require students to complete off-site internships. Students who successfully complete courses I and II will be eligible for one unit of Science credit.

**Information Technology**

**Computer Networking** - This class is designed to provide the student with the technical knowledge required to obtain an entry level job in the field of computer network installation and maintenance. While Computer Hardware Technology is not required as a prerequisite, basic knowledge of the workings of computers will make this class more accessible. Students who successfully complete Computer Hardware Technology and Computer Networking will be eligible for one unit of Math credit.

**Computer Hardware Technology** - (Formerly called A+ Computer Repair.) This class is designed to provide the student with the technical knowledge and skills required for an entry-level position in the information and computer technology career field. Additionally, students will be prepared to take the A+ Industry Certification Exam. Students who successfully complete Computer Hardware Technology and Computer Networking will be eligible for one unit of Math credit.

**Law and Public Safety**

**Security & Law Enforcement I** - This program introduces the student to the basic concepts of security and public safety, including homeland security, executive protection, and disaster preparedness.

**Security & Law Enforcement II** - This program introduces the student to the theory and practical applications of law enforcement and criminal justice.

**Transportation**

**Automotive Technology I & II** - This is an exploration of various segments of the automotive field, including in the second year, electronics, on-board computers, OBD I & II, transmissions, drive line and clutches, and engine service. Students who successfully complete courses I and II will be eligible for one unit of Math credit.

**Auto Body Technology I & II** - This course introduces students to structural and nonstructural automobile repair as well as waterborne painting technology. It offers students with the knowledge, skills, and professionalism needed in today’s auto body industry.

**Related Academics**

**Career Literacy (CTE English)** - All programs offer .5 credit per year in high school English, with the exception of Career Exploratory.

**HIGH SCHOOL EQUIVALENCY** - Eligible students may prepare for a General Equivalency Diploma while completing a vocational program.

**MST** - This integrated Math-Science-Technology Program fulfills the requirement for a third unit of Math or Science credit. Integrated/Specialized Science and Math - as indicated.

For more details on our programs, please visit our website www.dcboces.org/CTI or call Kirstin Litwin or Megan Amendola at 845.486.8001
## COURSE SELECTION WORKSHEET

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
<th>GRADE</th>
<th>COUNSELOR</th>
</tr>
</thead>
</table>

### ART Full Year
- □ 100 Studio-In-Art/Communications Systems
- □ 158 Studio-In-Art
- □ 159 Advertising Design
- □ 161 Studio-In-Art/Ceramics
- □ 162 Ceramics II
- □ 163 Studio-In-Sculpture
- □ 164 Advanced Art I - Drawing and Painting
- □ 165 Advanced Art II - Drawing and Painting
- □ 166 Studio-In-Art/3-Dimensional Design
- □ 167 3-D Design/Crafts II
- □ 168 Studio-In-Art/Design Works - Full Year
- □ 169 Media Arts II
- □ 170 Photography II
- □ 171 Broadcast Arts
- □ 172 Photography III
- □ 173 Media Arts III
- □ 174 Ceramics III
- □ 175 Studio-In-Art/Photomedia
- □ 176 3-D Design/Crafts III
- □ 177 Sculpture II
- □ 178 Portfolio Development
- □ 179 AP Studio Art
- □ 180 AP Art History

### BUSINESS EDUCATION Full Year
- □ 562 College Accounting
- □ 563 Business Ownership
- □ 700 School-To-Work (Diversified Co-op)
- □ 770 Work Based Learning (Business Co-op)
- □ 800 College Virtual Enterprise I
- □ 801 College Virtual Enterprise II

### BUSINESS EDUCATION Half Year
- □ 565 Microsoft Office
- □ 660 Entertainment Law
- □ 666 College Business Economics DCC 105
- □ 700 College and Career Planning

### ENGLISH Full Year
- □ 341 English 9
- □ 361 Honors English 9
- □ 386 English 9 Literacy Lab
- □ 441 English 10
- □ 461 Honors English 10
- □ 540 English 11 Regents
- □ 563 AP - Language & Composition
- □ 640 English Language Arts Skills I
- □ 662 English 12 - DCC 101/102
- □ 670 English 12
- □ 740 English Language Arts Skills II
- □ 881 AP - Literature & Composition
- □ 911 Academic Intervention Services

### ENGLISH/SOCIAL STUDIES Half Year
- □ 782 History DCC 102

### HEALTH Half Year
- □ 441 Health Education - 1st Sem
- □ 442 Health Education - 2nd Sem

### MATHEMATICS Full Year
- □ 21 DCC Calculus
- □ 331 Algebra 1A
- □ 341 Algebra +
- □ 351 Algebra
- □ 371 Algebra Honors
- □ 431 Algebra 1B
- □ 451 Geometry
- □ 481 Geometry Honors
- □ 541 Algebra 2N
- □ 581 Algebra 2
- □ 591 Honors Algebra 2
- □ 64 Pre-Calculus
- □ 645 Pre-Calculus
- □ 659 AP Computer Science
- □ 659 AP Statistics
- □ 661 Pre-Calculus
- □ 662 AP Calculus AB
- □ 681 AP Calculus BC
- □ 691 Multivar Calculus & Lin Algebra Honors
- □ 692 Math and Science Real World Applications

### MATHEMATICS Half Year
- □ 350 Math LAB for Algebra
- □ 401 Math AIS Regents Prep - 1st Sem
- □ 402 Math AIS Regents Prep - 2nd Sem
- □ 415 Computer Programming 1
- □ 446 Computer Programming 2
- □ 490 Math LAB for Geometry

### ENGLISH
- □ 566 English as a New Language

### FAMILY AND CONSUMER SCIENCES Half Year
- □ 496 Co-op Work Experience/Foods
- □ 694 Co-op Work Experience/Child Development & Psychology

### FAMILY AND CONSUMER SCIENCES Full Year
- □ 54 Co-op Work Experience/Foods
- □ 587 Food Prep/Nutrition
- □ 730 Baking and Pastry
- □ 740 Nutrition for Health, Fitness & Sports
- □ 750 Gourmet Foods
- □ 760 International/Regional Foods
- □ 770 Child Development and Psychology
- □ 780 Parenting
- □ 790 Adolescent Psychology
- □ 950 Interior Design
- □ 960 World of Fashion

### THEATRE Full Year
- □ 810 Theatre I
- □ 820 Theatre II
- □ 821 Theatre III
<table>
<thead>
<tr>
<th>COURSE SELECTION WORKSHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MUSIC</strong> Full Year</td>
</tr>
<tr>
<td>□ N627 Applied Music or Private Music Study</td>
</tr>
<tr>
<td>□ N632 Symphonic Band (JJ all days)</td>
</tr>
<tr>
<td>□ N635 Concert Band - All days</td>
</tr>
<tr>
<td>□ N643 Mixed Chorus (All days)</td>
</tr>
<tr>
<td>□ N646 Mixed Chorus (Every other day)</td>
</tr>
<tr>
<td>□ N649 Wind Ensemble (RCK all days)</td>
</tr>
<tr>
<td>□ N651 Music Theory I</td>
</tr>
<tr>
<td>□ N654 Ninth Grade Band</td>
</tr>
<tr>
<td>□ N655 Orchestra (All days)</td>
</tr>
<tr>
<td>□ N656 Orchestra (Every other day)</td>
</tr>
<tr>
<td>□ N657 Select Orchestra (All days)</td>
</tr>
<tr>
<td>□ N659 Music Theory II</td>
</tr>
<tr>
<td>□ N664 AP Music Theory</td>
</tr>
<tr>
<td><strong>MUSIC</strong> Half Year</td>
</tr>
<tr>
<td>□ N700 Music Workshop Semester</td>
</tr>
<tr>
<td><strong>PHYSICAL EDUCATION</strong> Full Year</td>
</tr>
<tr>
<td>□ P303 Personal Challenge - Grade 9</td>
</tr>
<tr>
<td>□ P313 Healthy Lifestyles - Grade 10</td>
</tr>
<tr>
<td>□ P333 Lifetime P.E. - Grades 11-12 - 1st Sem</td>
</tr>
<tr>
<td>□ P334 Lifetime P.E. - Grades 11-12 - 2nd Sem</td>
</tr>
<tr>
<td><strong>SCIENCE</strong> Full Year</td>
</tr>
<tr>
<td>□ S341 Physical Setting - Earth Science Regents</td>
</tr>
<tr>
<td>□ S361 Earth Science - Honors</td>
</tr>
<tr>
<td>□ S441 Living Environment - Regents</td>
</tr>
<tr>
<td>□ S461 Living Environment - Honors</td>
</tr>
<tr>
<td>□ S531 Marine Science</td>
</tr>
<tr>
<td>□ S538 Practical Chemistry - Non-Regents</td>
</tr>
<tr>
<td>□ S541 Physical Setting - Chemistry Regents</td>
</tr>
<tr>
<td>□ S561 Chemistry - Honors</td>
</tr>
<tr>
<td>□ S639 Conceptual Physics - Non-Regents</td>
</tr>
<tr>
<td>□ S640 Astronomy</td>
</tr>
<tr>
<td>□ S641 Physical Setting - Physics Regents</td>
</tr>
<tr>
<td>□ S661 Physics - Honors</td>
</tr>
<tr>
<td>□ S682 AP Chemistry</td>
</tr>
<tr>
<td>□ S687 AP Environmental Science</td>
</tr>
<tr>
<td>□ S688 AP Biology</td>
</tr>
<tr>
<td>□ S714 Forensic Science</td>
</tr>
<tr>
<td>□ S715 Human Anatomy, Physiology, and Disease</td>
</tr>
<tr>
<td>□ S716 Environmental Topics</td>
</tr>
<tr>
<td><strong>SECOND LANGUAGE</strong> Full Year</td>
</tr>
<tr>
<td>□ L123 French 2</td>
</tr>
<tr>
<td>□ L133 French 3</td>
</tr>
<tr>
<td>□ L145 French 4 H</td>
</tr>
<tr>
<td>□ L156 French 5 AP</td>
</tr>
<tr>
<td>□ L323 Italian 2</td>
</tr>
<tr>
<td>□ L333 Italian 3</td>
</tr>
<tr>
<td>□ L345 Italian 4 H</td>
</tr>
<tr>
<td>□ L355 Italian 5 Honors/College Credit</td>
</tr>
<tr>
<td>□ L366 Italian 5 Advanced Placement</td>
</tr>
<tr>
<td><strong>SECOND LANGUAGE</strong> Half Year</td>
</tr>
<tr>
<td>□ L513 Spanish 1</td>
</tr>
<tr>
<td>□ L510 Cultural Language</td>
</tr>
<tr>
<td>□ L523 Spanish 2</td>
</tr>
<tr>
<td>□ L533 Spanish 3</td>
</tr>
<tr>
<td>□ L545 Spanish 4 H</td>
</tr>
<tr>
<td>□ L556 Spanish 5 AP</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong> Full Year</td>
</tr>
<tr>
<td>□ D347 Global History I Regents</td>
</tr>
<tr>
<td>□ D367 Global History I Honors</td>
</tr>
<tr>
<td>□ D377 AP World History I</td>
</tr>
<tr>
<td>□ D401 Global Hist. AIS Regents Prep - 1st Sem</td>
</tr>
<tr>
<td>□ D402 Global Hist. AIS Regents Prep - 2nd Sem</td>
</tr>
<tr>
<td>□ D447 Global History II Regents</td>
</tr>
<tr>
<td>□ D467 Global History II Honors</td>
</tr>
<tr>
<td>□ D477 AP World History II</td>
</tr>
<tr>
<td>□ D547 United States History Regents</td>
</tr>
<tr>
<td>□ D567 United States History Honors</td>
</tr>
<tr>
<td>□ D587 AP United States History</td>
</tr>
<tr>
<td>□ L780 AP European History</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong> Half Year</td>
</tr>
<tr>
<td>□ D605 Participation in Government</td>
</tr>
<tr>
<td>□ D649 AP Micro/Low</td>
</tr>
<tr>
<td>□ D650 AP Economics</td>
</tr>
<tr>
<td>□ D655 Economics</td>
</tr>
<tr>
<td>□ D700 AP P.I.G. /Government</td>
</tr>
<tr>
<td>□ D710 Law and the Individual</td>
</tr>
<tr>
<td>□ D720 Psychology</td>
</tr>
<tr>
<td>□ D722 DC Psychology</td>
</tr>
<tr>
<td>□ D740 World at War</td>
</tr>
<tr>
<td><strong>TECHNOLOGY EDUCATION &amp; ENGINEERING</strong> Full Year</td>
</tr>
<tr>
<td>□ T100 Studio-In-Art/Communications Systems</td>
</tr>
<tr>
<td>□ T720 Transportation Systems</td>
</tr>
<tr>
<td>□ T750 Design &amp; Drawing for Production</td>
</tr>
<tr>
<td>□ T771 Digital Electronics</td>
</tr>
<tr>
<td>□ T773 Principles of Engineering</td>
</tr>
<tr>
<td>□ T774 Civil Engineering &amp; Architecture</td>
</tr>
<tr>
<td>□ T775 Engineering Design &amp; Development</td>
</tr>
<tr>
<td>□ T780 Manufacturing Systems</td>
</tr>
<tr>
<td><strong>TECHNOLOGY EDUCATION &amp; ENGINEERING</strong> Half Year</td>
</tr>
<tr>
<td>□ T710 Communication Systems</td>
</tr>
<tr>
<td>□ T723 Construction Systems</td>
</tr>
<tr>
<td>□ T725 Basic Electricity/Electronics</td>
</tr>
<tr>
<td>□ T735 Technical Drawing</td>
</tr>
<tr>
<td>□ T742 Web Design and Animation</td>
</tr>
<tr>
<td>□ T743 Computer Graphics</td>
</tr>
<tr>
<td>□ T745 Computer Aided Design</td>
</tr>
<tr>
<td>□ T753 Materials Processing (Wood)</td>
</tr>
<tr>
<td>□ T754 Advanced Woodworking</td>
</tr>
<tr>
<td>□ T759 Materials Processing (Metal)</td>
</tr>
</tbody>
</table>