Lakeland Central School District

2019-2020
High School
Program of Studies

Lakeland High School       Walter Panas High School

www.lakelandschools.org
Lakeland Central School District

Mission Statement
The Lakeland Central School District accepts the challenge of preparing students for a rapidly changing world. We provide the opportunity for all students to learn and succeed by promoting critical thinking and high academic standards in a safe and secure environment. Our practices and policies are shaped by: respect, kindness, responsibility, accountability and honest and ethical behavior.

Core Belief Statement
The Lakeland Central School District believes that all members of the school community should:

- Treat each other with respect and kindness.
- Assume responsibility and accept accountability for their actions.
- Engage in and promote critical thinking to achieve high academic standards.
- Demonstrate honest and ethical behavior.

Vision Statement
The Lakeland Central School District will work collaboratively with all members of the community to promote cooperation, collegiality, and a love of learning so all can achieve to their fullest potential. We will focus on the whole person academically, socially, and emotionally. We also work to ensure safety and security and inspire all to communicate honestly to achieve our goals.

EQUAL OPPORTUNITY
The Lakeland Central School District does not discriminate on the basis of gender, race, creed, national origin, age, or handicap in its employment, admissions practices, vocational education opportunities, or access to – and treatment in – programs and activities, in accordance with the Title IX and Section 504 of The Rehabilitation Act of 1973.
Dear Students & Families of Lakeland Central School District:

We present to you the High School Program of Studies of the Lakeland School District. This publication contains the information you will need to create the best possible academic program for the 2019-2020 school year and beyond.

Our school district program provides students with a complete array of course offerings. As you choose your courses for the 2019-2020 school year, please carefully consider graduation requirements, promotion policies, instructional level guidelines and course descriptions.

Please take note that the high school program of studies provides information for Lakeland and Walter Panas high schools and for courses for self-contained special education students as recommended by the Committee on Special Education. Courses offered only at Lakeland will appear with the letter “L”, and those courses offered only at Walter Panas will be designated with a “P”. Please note that some courses may be offered in alternate years. Please consult your school counselor for more information.

Please be aware that this publication is not designed to answer all questions about a student’s schedule. It is our expectation that you will pursue all avenues available in planning your high school schedule and program. Our school counselors are ready to assist you in this process. They welcome any questions and concerns you may have about requirements, changes, and sequences affecting your high school plan of study and final course selections.

In closing, we ask that you read this information carefully and vigorously utilize the services offered by our school district. School counselors, teachers, subject area chairpersons, and administrators are willing to discuss the many educational opportunities available at our high schools.

We wish you a successful, challenging, and rewarding academic year and career at Lakeland High School and Walter Panas High School.

Sincerely,

Christopher Cummings, Principal
Lakeland High School

Joseph Spero, Principal
Walter Panas High School
A Message from School Counseling | Guidance Department

Dear Students & Families of Lakeland Central School District:

The 2019-2020 Program of Studies provides important information concerning all of our course offerings at both Lakeland and Walter Panas high schools. We strongly encourage selecting courses that are meaningful to your personal goals and interests.

Students will begin scheduling for the 2019-20 school year at the beginning of the 2nd Semester. We begin the scheduling season with an evening scheduling assembly for families, followed by grade level assemblies and elective fair. Students will then meet with their school counselor to discuss his/her progress and selecting courses for the following year.

The Lakeland CSD School Counseling | Guidance Department staff will work in partnership with students, families, staff and all community stakeholders to prepare students to achieve success in school and live successful and rewarding lives. All students must believe they belong in our academic community, they can succeed, their ability and competence grow with effort, and the work they do in school has value to them as we prepare all our students for their unique post-secondary journey, to be college & career ready, and to successfully manage their lives as responsible and productive citizens. We are deeply committed to your child’s success and transition to a meaningful post-secondary choice.

Respectfully,

The Counseling Department

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All Lakeland CSD students must complete a minimum of 22 credits and pass Regents exams to qualify for a NYS High School Diploma (*see charts below for details*). We strongly encourage all college bound students to take four years of Math, Science, and World Languages (LOTE) to be best prepared for academic life beyond the high school.

### REQUIRED COURSES

<table>
<thead>
<tr>
<th></th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ENGLISH</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>SOCIAL STUDIES</strong></td>
<td></td>
</tr>
<tr>
<td>Global History (2)</td>
<td></td>
</tr>
<tr>
<td>U.S. History (1)</td>
<td>4</td>
</tr>
<tr>
<td>Participation in Govt. (0.5)</td>
<td></td>
</tr>
<tr>
<td>Economics (0.5)</td>
<td></td>
</tr>
<tr>
<td><strong>MATH</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>SCIENCE (a)</strong></td>
<td></td>
</tr>
<tr>
<td>Life Science (1)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science (1)</td>
<td></td>
</tr>
<tr>
<td>Life or Physical Science (1)</td>
<td></td>
</tr>
<tr>
<td><strong>Languages Other than English (LOTE) (b)</strong></td>
<td>1</td>
</tr>
<tr>
<td>**The ARTS</td>
<td>Art &amp; Music**</td>
</tr>
<tr>
<td><strong>ELECTIVES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CREDITS REQUIRED</strong></td>
<td>22</td>
</tr>
</tbody>
</table>

**NOTE:** Any course taken that exceeds the Mandatory Class Requirements will count towards Elective Credits. Additionally, we offer a variety of electives to meet your child’s career interests in each of the subject areas listed above and, in our Career, & Technical Education (CTE) department. It is not uncommon for students to graduate with the minimum of 22.

**PHYSICAL EDUCATION** | 2  
**HEALTH** | 0.5  

---

**a.** Students must pass 1 Regents Exam in Science. This science course can be either a Living or Physical course with 1200 minutes of Lab.

**b.** Students with a disability may be excused from LOTE if indicated on IEP; however, 22 Credits are still required to graduate.
### Graduation Requirements contd.

#### 4+1 Pathways to Graduation

<table>
<thead>
<tr>
<th>Regents Diploma</th>
<th>Local Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>65% or Above</td>
<td>55% or Above</td>
</tr>
<tr>
<td>1 English</td>
<td>1 English</td>
</tr>
<tr>
<td>1 Social Studies</td>
<td>1 Social Studies</td>
</tr>
<tr>
<td>1 Math</td>
<td>1 Math</td>
</tr>
<tr>
<td>1 Science</td>
<td>1 Science</td>
</tr>
<tr>
<td>1 Pathway (b)</td>
<td>1 Pathway (b)</td>
</tr>
</tbody>
</table>

#### a. A score of 45-54 (except ELA and Math – 55 required) can be compensated by a score of 65 or above on another required Regents exam, in addition, the student must pass the course in which he or she earned a score of 45-54.

#### b. 4+1 Pathway Options:
- Pass an additional social studies Regents, Approved Alternative; or
- Pass an additional math Regents, Approved Alternative; or
- Pass an additional science Regents, Approved Alternative; or
- Qualify for CDOS Commencement Credential
- Pass a CTE pathway assessment & completion of program

### Important Note

- Students may earn diploma credit for successfully completing a course but fail to meet the corresponding Regents assessment requirement; or
- Students can fail a course and receive no academic credit but fulfill an assessment requirement if they pass a Regents examination in that course.
- As long as students earn the 22 credits in the required disciplines and pass the required assessments in the discipline they meet the diploma requirements

**Regents Appeals & Superintendent Determination** will only be discussed as an option for graduation after each Regents exam has been taken twice and other district requirements have been met, to include pass the class that corresponds with Regents exam.
Academic Policies

Instructional Level Placement

The Lakeland CSD District is an open-enrollment district. We value and encourage each student to challenge themselves and have established a policy for students who wish to pursue a higher level of study that does not follow the school’s course recommendation. Please know that we take serious our course recommendations and take many factors into consideration, to include reviewing past academic performance, standardized test scores, attendance, student commitment, study habits, classroom teachers' recommendations, and educational and career goals. If you have any concerns regarding your child's instructional-level placement, please call the Guidance Office at Lakeland High School (914) 528-0600 or at Walter Panas High School at (914) 739-2823.

Grading Policy

- **Course Credit**
  - Credit will be granted when final average achieved is 65, to include meeting attendance requirements.

- **Final Course Average**
  - **Full-Year Course**: 4 Quarterly Grades + Final Exam, then divide by 5
  - **Semester Course**: 2 Quarterly Grades + Final Exam, then divide by 3
  
  Note: Any grading practice that differs from the formulas above will be communicated by the teacher

- **Cumulative GPA**
  All courses taken, corresponding final averages, and credits earned are maintained on a permanent record. Both a weighted and unweighted GPA are annotated on a student's transcripts for college admission consideration.

  - Honors & College Courses Weight: +4 points added to the Final Average
  - Advanced Placement (AP) Weight: +5 points added to the Final Average

Academic Reports

Academic Reports are available through the Home Access Center, which include:

- **Interim Reports**: Issued 4 times per year at the midpoint of the quarter (5 weeks)
- **Report Cards**: Issued 4 times per year at the end of each quarter (10 weeks)

High School Course Designations

The High School Program of Studies includes the offerings for both Lakeland and Walter Panas High Schools. If no letter appears before a course description, then the course is offered at both schools.

- “L” appearing before a course number indicates course only offered at Lakeland High School.
- “P” appearing before a course number indicates course only offered at Walter Panas High School.
- Courses with this symbol are NCAA Approved

Repeating a Course

Students who fail a course required for graduation must either repeat the course or pass a New York State Education Department-approved summer school and/or credit-recovery online program. When a course is repeated to obtain a passing grade, the prior failing grade will be changed to an F on the transcript and only the new passing grade will factor into a student’s GPA.

School-To-Career Activities

School-to-career concepts and project-based learning activities are an integral part of the curriculum at all levels. In addition to school-based internship experiences offered to seniors, our students are afforded the opportunity to attend the Tech Academies at PWBOCES, Union Field Trips, Career Day activities.

College & Career Center

Each high school guidance office has a College & Career Center that coordinates all college visits, scholarship opportunities, transcript verifications, and monthly newsletters. All students, grades 9-12 have access – speak with your school counselor for more information.

Academic Recognition

We recognize student academic achievement each quarter for students that attain the following GPA’s: *High Honor Roll*: 95%; *Honor Roll*: 90%; *Credit Roll*: 85%. These averages are non-rounded, unweighted grades, and the students must be enrolled in a minimum of five courses during the quarter in which the honor roll is calculated.
National Honor Society
The National Honor Society (NHS) is a prestigious organization that stresses the qualities of scholarship, character, service, and leadership. Eligible students will receive an invitation packet and application the summer before their senior year.

**Induction criteria:**
- have at least an 88 average (unweighted and non-rounded)
- have a positive discipline and behavior record
- submit proof of completion for 80 hours of service
- submit invitational packet and letters on time
- maintain good grades and positive behavior once inducted
- complete an additional 20 hours of service during senior year
*The induction ceremony is held in October*

Note: Students may appeal a denial for induction through the procedures outlined in the NHS handbook.

Honor, College, & AP Courses
When students and families consider selection of Honors, College, and/or Advanced Placement courses, the best interests of the child should be the primary consideration for this decision. The desire for academic challenge should be in balance with the student’s overall well-being and future goals. The school’s recommendation is designed to set your child up for success. As students work their way through their course load, their progress will be closely monitored to ensure that this guideline is being followed. A student’s selection to honors courses is based on several factors including grade point average, standardized test scores, teacher and/or counselor recommendation, and a demonstrated capacity for serious study. Students who wish to pursue a higher level of study that does not follow the school’s course recommendation (i.e., Leveling-Up) may appeal this through a formal Academic Advisement process.

Leveling-Up
Beginning 2nd Semester, classroom teachers conduct an Academic Advising session with students and make course recommendations for the upcoming school year. Though many courses follow the prescribed sequence from NYS, Honors, College, and AP courses often require teacher recommendations. If a student does not receive a teacher recommendation for a level-up course, they can complete an Academic Advising Form. The student and/or parent will be given an opportunity to meet again with the teacher so that any concerns can be clearly communicated. If the teacher’s original recommendation stands, the Academic Advising Form and request to Level-Up must be signed by a parent and returned to the school counselor by the last school day in April.

Note: This form does not override the course prerequisites

Homebound Instruction
Homebound Instruction is district supported tutoring for students who have been:
1. Suspended out of school
2. Missed a minimum of 5 consecutive days due to medical condition

Please note:
- Tutoring may be provided by district employed tutors, agency-assigned tutors, or through online tutoring.
- Tutoring hours cannot be consolidated into certain subjects and cannot be postponed for future use.
Honors, College, & AP Course Offerings

It is the expectation of the Lakeland central School District that all who enroll in AP and/or College Courses pay for the exam and/or course when due. Additionally, it is expected that all students taking an AP course take the AP exam. Successful achievement on the AP exam and passing a College course may result in college credit (see chart below).

### Advanced Placement (AP) Courses - $94 per exam

<table>
<thead>
<tr>
<th></th>
<th>LHS</th>
<th>WPHS</th>
<th>Min. Score</th>
<th>Semesters Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP English Language</td>
<td>AP English Language</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AP English Literature</td>
<td>AP English Literature</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AP World History</td>
<td>AP World History</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AP US History &amp; Govt.</td>
<td>AP US History &amp; Govt.</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Macroeconomics</td>
<td>AP Macroeconomics</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Psychology</td>
<td>AP Psychology</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Human Geography</td>
<td>AP European History</td>
<td>3</td>
<td>1</td>
<td></td>
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<tr>
<td><strong>Social Studies</strong></td>
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<td></td>
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<tr>
<td>AP Calculus AB</td>
<td>AP Calculus AB</td>
<td>3</td>
<td>1</td>
<td></td>
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<tr>
<td>AP Statistics</td>
<td>AP Statistics</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Environmental Science</td>
<td>AP Environmental Science</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>AP Chemistry</td>
<td>3</td>
<td>2</td>
<td></td>
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<tr>
<td>AP Biology</td>
<td>AP Biology</td>
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<td></td>
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<td>AP Physics 1</td>
<td>AP Physics 1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AP Physics 2</td>
<td>AP Physics 2</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>World Languages</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>AP Spanish</td>
<td>AP Spanish</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AP Italian</td>
<td></td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>AP Studio Art</td>
<td>AP Studio Art</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AP Music Theory</td>
<td>AP Music Theory</td>
<td>3</td>
<td>1</td>
<td></td>
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<tr>
<td>AP Computer Science</td>
<td>AP Computer Science</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>**ARTS</td>
<td>CTE**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP Art</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AP Music</td>
<td></td>
<td></td>
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<tr>
<td>AP Theater</td>
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</tbody>
</table>

### College Courses

**SUNY Policy on Award of Credit by Examination**

<table>
<thead>
<tr>
<th></th>
<th>LHS</th>
<th>WPHS</th>
<th>Min. GPA</th>
<th>Credits Earned</th>
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<tbody>
<tr>
<td>**MARIST</td>
<td>$100 per credit (2018/19)**</td>
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<tr>
<td>English</td>
<td></td>
<td>College Writing</td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>**Syracuse University - SUPA</td>
<td>$115 per credit (2018/19)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American History</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>Sports Management</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>**University at Albany</td>
<td>$160 per course (2018/19)**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Research</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>**Westchester Community College</td>
<td>$61 per credit (2018/19)**</td>
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<td></td>
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</tr>
<tr>
<td>World Languages</td>
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<tr>
<td>Spanish 4</td>
<td></td>
<td></td>
<td>73%</td>
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<tr>
<td>Spanish 5</td>
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<td>Italian 4</td>
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<td>73%</td>
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<tr>
<td>Accounting</td>
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<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>Marketing</td>
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<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>Business Law</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>Computer Info. System</td>
<td></td>
<td></td>
<td>73%</td>
<td>3</td>
</tr>
<tr>
<td>**ARTS</td>
<td>CTE**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intro to C++</td>
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<tr>
<td>Business Law</td>
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<td>Computer Info. System</td>
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### Honors Courses

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td><strong>English</strong></td>
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</tr>
<tr>
<td>English 9</td>
<td>English 9</td>
<td></td>
</tr>
<tr>
<td>English 10</td>
<td>English 10</td>
<td></td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
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<td></td>
</tr>
<tr>
<td>Pre-AP World</td>
<td>Pre-AP World</td>
<td></td>
</tr>
<tr>
<td>Algebra 2/Trig</td>
<td>Algebra 2/Trig</td>
<td></td>
</tr>
<tr>
<td>Geometry</td>
<td>Geometry</td>
<td></td>
</tr>
<tr>
<td>Pre-Calculus AB</td>
<td>Pre-Calculus AB</td>
<td></td>
</tr>
<tr>
<td>Pre-Calculus BC</td>
<td>Pre-Calculus BC</td>
<td></td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Environment</td>
<td>Living Environment</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Note:**
- LHS and WPHS: Lakeland High School and Western Hills Park School
- College courses offer credit based on the SUNY Policy on Award of Credit by Examination.
Scheduling

Students will meet with their school counselor to review course options for the upcoming school year. Students and parents will receive an initial course request verification for review (the course verification will also be available through the parent portal in eSchool). Please review carefully and any issues and concerns should be shared with the student’s school counselor. A second course verification form will be available for review before the end of June.

- All students will receive their new schedule by mid-August. If all the required courses and at least one elective are on the schedule, then everything is ready for the first day of school.
- Student and parents will be notified when the 2019-2020 Add/Drop Form is available online.
- If the course change request is made after the school year begins, the student must attend class until a determination has been made.

The selection of courses requires careful planning, serious thought and proper guidance. Since classes are established based on course requests, students are expected to remain in the courses they select. It is only in extraordinary circumstances that students should change courses after course selection is complete.

Important Note: Schedule changes can be made any time throughout the school year by school administration and/or guidance when:
- Conflict with the original course selection
- Need for changes in an instructional level as determined by classroom teacher and/or school administration.
- Change in academic status after attending summer school

Course Availability
The course catalog lists all courses available to students; however, not all will be offered. In the event of insufficient enrollment, staffing considerations, and fiscal restraints, we may cancel a course. Additionally, courses within the same discipline, but on different levels, may be combined as a result of low enrollment.
The English curriculum provides opportunities for students to reflect and share their thinking. Students read and study classical and contemporary literature, paired with rich informational text, and critically analyze an extensive range of various media. Students gather, comprehend, evaluate, and synthesize information and ideas, and conduct original research in order to generate and answer questions, to solve problems, and to write in a logical, cohesive manner. In order to meet the NYS Diploma Requirements, all students must take four years of English and must pass the Regents examination in English Language Arts.

**Director of Curriculum:** Dr. Theresa Wilkowski

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**Important Note Regarding Class Selection**

Students are not on a prescribed Academic Track and may move from a Non-Honors Course to an Honors/College/AP Course in any grade; however, please note that the student’s academic performance and teacher recommendation are critical factors in determining placement.

We encourage all students to challenge themselves academically and any decision must be balanced with the student's overall well-being and future goals.
9th Grade Courses

003/710 English 9  
1 Credit  
40 Weeks  
The Ninth Grade English program fosters the development of language arts skills introduced in previous years. Students build vocabulary competency and utilize critical reading, thinking, and writing skills to analyze and interpret various literary genres, including global literature selections. Collaborative and independent research and creative projects enable students to demonstrate language arts proficiency.

004 English 9-Honors  
1 Credit  
40 Weeks  
The Ninth Grade English Honors program challenges students to demonstrate their depth of understanding, knowledge and application of language arts skills that exceed grade level expectations. Criteria for enrollment include standardized and New York State Test scores, report card grades, and teacher recommendation. The course of studies for successful students includes English 10 Honors, English 11 AP Language and Composition and English 12AP Literature and Composition.

10th Grade Courses

023/720 English 10  
1 Credit  
40 Weeks  
The Tenth Grade English program offers a variety of rich texts that engage students in analysis of literary and informational text, as well as poetry, drama, and fiction. Students build knowledge, analyze ideas, delineate arguments and develop writing, collaboration, and communication skills. Collaborative and independent research and creative projects enable students to demonstrate language arts proficiency. **Prerequisite:** Successful completion of English 9

024 English 10-Honors  
1 Credit  
40 Weeks  
The Tenth Grade Honors program focuses on developing higher-level critical thinking and reasoning skills to interpret and analyze a rich and diverse selection of literature and informational texts. Students are challenged to develop and demonstrate their depth of understanding, knowledge and application of language arts skills through discussion, presentations, and research. Students build vocabulary competency for success on the PSAT and SAT exams and AP exams. **Prerequisite:** Successful completion of English 9

11th Grade Courses

033/726 English 11  
1 Credit  
40 Weeks  
Eleventh Grade English program primarily focuses on American literature and critical reading and writing. Students build vocabulary competency in preparation for the PSAT and SAT exams. Emphasis is on critical thinking, reading and writing in preparation for the required Regents exam in English Language Arts (Common Core) in June.  
**Prerequisite:** Successful completion of English 10

034 English 11 AP Language & Composition  
1 Credit  
40 Weeks  
The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods” (The College Board). All students enrolled in this course are expected to take the AP exam in May as well as the required Regents exam in English Language Arts (Common Core) in June.  
**Prerequisite:** Successful completion of English 10

12th Grade Courses

732 English 12  
1 Credit  
40 Weeks  
The Twelfth Grade English program emphasizes the use of language skills in preparation for success beyond high school. Using literary and informational texts as a springboard for critical thinking, students focus on connecting personal values to world issues. Senior research projects are required. Internship programs are available at both high schools. **Prerequisite:** Successful completion of English 11
044 English 12 AP Literature & Composition
1 Credit 40 Weeks
Literature enriches our lives and improves our ability to understand the thoughts and feelings of others. This course provides students with an opportunity to elevate their writing style and read and discuss time-honored poems, plays, and novels. Highly motivated, exceptional students, who seek a challenging, but approachable level of literary study, are encouraged to take this college-level course. Students are expected to take the AP exam in May.
Prerequisite: Successful completion of English 11

P047 English 12 – WISE Individualized Senior Experience
1 Credit English & ½ Social Studies -- 40 weeks
WISE serves as a bridge for seniors from high school to college, work, and lifelong learning. Students have the option to participate in a second semester senior internship. Admission is by application by the end of the 11th grade.
Internships run from February through June and include 8-10 hours per week at the site, as well as a research project and a presentation. Students in the WISE program represent the school in public, so it is important that the participants demonstrate good character and good decision-making skills. Serious discipline or academic failures may prevent a student from being accepted or remaining in this program. This course satisfies the ½ credit of required senior social studies - Participation in Government in lieu of Politics and gives the ½ credit elective credit as well as the 1 English credit. NOTE: Students enrolled in this class must also enroll in course 159 Social Studies (WISE).
Prerequisite: Successful completion of English 11

L045 English 12 - Internship
1 Credit English & ½ Social Studies -- 40 weeks
This course offers a work-based learning opportunity to assist students with the link between school and careers. During the first ten weeks, the course will prepare students for an internship experience through a variety of activities including workplace issues, resume writing, the employment process, etc. Students will then have the opportunity to obtain awareness of specific careers by working as interns with mentors in their related field of interest. This course satisfies the ½ credit of required senior social studies - Participation in Government in lieu of Politics and gives the ½ credit elective credit as well as the 1 English credit. NOTE: Students enrolled in this class must also enroll in the following courses: 162 Internship/Politics and 533 Internship/Work Study.
Prerequisite: Successful completion of English 11

English 12 Half-Year Courses

042 English 120 College Writing Honors
½ Credit 20 weeks
This course is an intensive sequence instructing students in the process and conventions of academic writing at the college level. Students are guided through the writing processes and conventions of college-level academic writing. Greater emphasis is placed on synthesizing ideas from diverse readings into more complex essays. Students will compose and revise 8-12 essays of varying lengths, including a substantial research project and presentation. By the end of the course, students will have acquired an array of writing and revision techniques and will have gained a better understanding of their own critical perspective.
Note: Marist College requires that students must have a minimum cumulative grade point average of 85 to enroll in this course. Enrollment is limited to 18 students per section. Seats in this class will be assigned through random computer selection. Students may earn three college credits. The fee for this class is $300.

011 English 12 Sports Literature: Heroes and Controversies
½ Credit 20 weeks
This course will focus on the role sports plays in our lives as expressed through written and visual media. It will emphasize critical reading and written analysis of sports-related novels, short stories, poems, articles, and films. We’ll debate controversial issues, read about legendary games and players, and write about all things related to the exciting world of sports. Course work includes a research project and presentation. This course will also follow a Blended Learning format in which students will receive instruction from the classroom teacher on select days of the weekly cycle, while completing additional classwork on a Virtual Learning Format.

012 English 12 Psychology in Literature, Film, and Life
½ Credit 20 weeks
This course is designed for students who would like to read literature, see films, and discuss works that deal with characters who experience psychological problems. The characters’ problems may be the result of their personal inadequacies and stem from a conflict with a society that imposes its value system and restrictions on them. Are you interested in what makes people behave the way they do? This interdisciplinary course examines novels, short stories, poems and film through the lens of characters that experience psychological problems. Students will analyze and discuss characters’ dilemmas which may result from their personal inadequacies and stem from a conflict with a society that imposes its value system and restrictions on them. Course work includes a research project and presentation.
013 English 12 Presentation and Public Speaking
½ Credit 20 weeks
Students will be able to speak confidently. Being a critical thinker and an effective communicator is a powerful and empowering combination, which are essential for success. Being an effective public speaker can open up leadership and career opportunities. Course work includes a research project and presentations.

015 English 12 Leadership - How to Make a Difference
½ Credit 20 weeks
Today, the word “millennial” has to come mean an individual who cares about nothing and no one other than themselves. WE DISAGREE! This class will challenge you to make your mark on the world, get involved, and do something to make a difference which will prove the stereotype wrong. In this class we will explore the questions What Does it Mean to be Human? What is Our Responsibility to Our World? Do we ALL HAVE a responsibility to our world? What Does it Mean to be a Community Member? What Does it mean to be an active member of society? What does it mean to be nice? What is RESPECT? What is success? How will YOU make a difference?
Students will research and complete a community service project and presentation. Course work includes a research project and presentation.

060 English 12 Mystery, Suspense, and Horror
½ Credit 20 weeks
Designed for the future detective, the horror film buff, and the one who will go down the dark staircase first. The Simpson’s Treehouse of Horror does not cover it all. Let us take a look at the dark and dreary. Why do we like to be afraid and why do we like to examine the fears that keep us up at night? Who cares? Let’s go down the dark road and if the flashlight does not work...so much the better! Course work includes a research project and presentation.

L017 English 12 Documentaries: A Study of Real Life in Film
½ Credit 20 weeks
What is a documentary? How do documentaries influence and shape our opinions of the world we live in? This course will give students the opportunity to view, analyze and discuss a variety of documentaries ranging in topics. We will look at how filmmakers use fact and narrative to communicate a desired message to his or her audience. Through close analysis and discussion of the films viewed in class students will be asked to consider the objectivity and validity of the issues and events portrayed in the films as well as the film-makers’ purpose in its creation. Students will also have the opportunity create a documentary on a topic of interest. Course work includes a research project and presentation.

P018 English 12 20th Century Literature, Film, and Modern Culture
½ Credit 20 weeks
This semester course provides students, who have an interest in literature, film and its role in our society, opportunities to assess and compare literature to film and to reflect on our values, our customs, and our connections. Students will view, analyze and discuss literature and films and will examine genres of film. Please note that some of these films have mature content, violence and explicit language and some may be rated “R” and “PG-12”. By registering for this course, it is understood that parents have indicated that the students are allowed to watch films with this content or ratings. Course work includes a research project and presentation.

SUMMER READING REQUIREMENTS
All core English courses include a summer reading requirement. Texts are assigned in June based on grade level and course. Related assignments and assessments will be conducted at the start of the new school year.
Summer reading assignments can be found on the district’s website in the Curriculum and Instruction section.

English Electives ~ Grades 10 - 12

The following courses are elective classes and do not meet the English requirement for graduation.

Course: 057 Creative Writing L-only
½ Credit 20 weeks
Do you love to write and express yourself? Then this is a course for you. Students will write poetry, personal narratives, and short stories in this course. Students share work with others, give and receive feedback, participate in class discussions, analyze, and enjoy the freedom and time to write.

P056 Introduction to Theatre
1 Credit 40 weeks
This course involves students in a practical approach to the theatre. It includes a study of theatre history, live theatre, creative dramatics, and theatre management. Class activities include oral interpretations and class discussions of classic and contemporary drama, scene enactment from contemporary works, playwriting, improvisation activities, and monologue performances.
L058/P067 English 12 Universal Language of Music  
½ - Credit  20 weeks  
Do you enjoy listening to music? Is updating your playlist one of your top priorities? Do you enjoy exploring, sharing, and discussing different musical genres and artists? If you’ve answered yes to any of these questions then this course is for you! In this course will explore and celebrate the exciting universal language of music, everything from Mozart to Mastodon, Robert Johnson to Jason Aldean, Lady Gaga to Lil Uzi Vert. Students are required to keep “open ears and an open mind”-- to respect each other’s musical tastes and opinions as we investigate the thematic connections between a variety of musical and literary genres, including short stories, poetry, and non-fiction. We will interpret and analyze songs through conscientious and active listening, a close reading of lyrics, and the identification of literary and poetic elements and devices; and realize how all music speaks a universal language in our lives. Course work includes a research project and presentation.

L054/P727 Psychological Fiction  L-only  
½ - Credit  20 weeks  
This course is designed for students who would like to read, see films, and discuss works that deal with characters in literature who experience psychological problems. The characters’ problems may be the result of their personal inadequacies and stem from a conflict with a society that imposes its value system and restrictions on them.

L0027 Myths, Heroes, and Superheroes  
½ - Credit  20 weeks  
What makes a superhero? From Superman and Batman to the Hulk and Captain America, many of the heroes in today’s popular culture are inspired by the tales of bravery and tragedy in classic Greek and Roman mythological works. In this course, you will study the idea of modern superheroes, their depiction in various forms of entertainment, and their connections to ancient mythology. Through reading a range of texts, discussion and writing you will study these narrative connections, as well as examine the philosophical ideas behind each connection.

L0028 How to Win an Argument: Current Issues and Debates  
½ - Credit  20 weeks  
Today’s fast-paced world is filled with many problems, and many possible solutions to these problems. The solutions are not always clear, however, leading to intense debates in cafeterias and conference rooms around the world. This course will teach you how to win those debates. We will research and debate controversial issues related to school, sports, censorship, technology, gun violence, the environment, and much more. You will explore issues you care about, while also discovering new issues that impact your life and the world. You will take positions on these issues and be expected to defend your position in both verbal and written form. Your grade will be based on individual & group work.

Course: 061 Learning Center  
This non-credit course is mandated by New York State Educational Law for any student whose test score on the New York State assessments in English falls below the state reference points. Other students who need academic assistance may be scheduled into the program for academic support in any subject area, to build study skills, and to learn test-taking skills. Students needing to take Regents Exams for course credit are also scheduled.

OC21 | 21st Century Skills for College & Career Readiness  
❖ Zero to Sixty: Writing Your First Novel | Fall & Spring Semester  
Do you secretly dream of writing a book? A novella is a great place to start! These short books allow beginning writers to stretch themselves past the short story.

❖ You Are What You Eat: The Truth Behind Your Food | TBD  
Have you ever wondered where your food comes from? In this course, students will explore societal problems that are directly related to food availability, preparation, distribution, and consumption. Through a critical examination of nutrition articles, books, blogs, social media, consumer reports, and food labels, students will seek the truth behind some of our popular food choices.
English as a New Language

The Lakeland Central School District’s high school English as a New Language program is housed at Walter Panas High School. Students are placed at levels determined by screening with the NYSITEL for new students or the annual NYSESLAT exam for continuing students. Each course level correlates to a minimum number of state-mandated instructional minutes.

Coordinator: Kathy Mills-Hastings, ENL Teacher – George Washington ES

Entering
A student at this English language proficiency level relies heavily on teacher supports and instructional scaffolds to advance his or her academic language skills. As measured by the NYSITELL or the NYSESLAT, a student at this level has yet to meet the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts within his or her grade level.

Emerging
A student at this English language proficiency level relies on teacher supports and instructional scaffolds to advance his or her academic language skills. As measured by the NYSITELL or the NYSESLAT, a student at this level has yet to meet the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts within his or her grade level.

Transitioning
A student at this English language proficiency level shows increasing independence in advancing his or her academic language skills. As measured by the NYSITELL or the NYSESLAT, a student at this level has yet to meet the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts within this grade level.

Expanding
A student at this English language proficiency level shows great independence in advancing his or her academic language skills. As measured by the NYSITELL or the NYSESLAT, a student at this level is approaching the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts within this grade level.

Commanding
As measured by the NYSESLAT, a student at this level has met the linguistic demands necessary to demonstrate English language proficiency in a variety of academic contexts within his or her grade level. This student is designated as a Former ELL and is entitled to receive two years of former ELL services.
SOCIAL STUDIES

Students completing the required sequence of courses in Social Studies will demonstrate an understanding of democratic values and responsibility for government. They will gain an appreciation of cultural diversity, an overview of world history, and an understanding of contemporary issues. They will develop an awareness of the economic, social, political and environmental interdependence of all nations and people. They will acquire knowledge of their role in today’s world and their place in the world of the 21st century. In addition, students will gain skill in critical thinking, problem solving, research, and communication.

**Important note**: The new Framework Regents format for Global History and Geography II exam will be given to all 10th grade students.

**Coordinator**: Michael Schaper, Social Studies Teacher - Lakeland High School

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**Important Note Regarding Class Selection**

Students are not on a prescribed Academic Track and may move from a Non-Honors Course to an Honors/College/AP Course in any grade; however, please note that the student’s academic performance and teacher recommendation are critical factors in determining placement.

We encourage all students to challenge themselves academically and any decision must be balanced with the student's overall well-being and future goals.
9th Grade Courses

L103/P712 Global History
1-credit 40 weeks
This two-year program for grades 9-10 provides students with the opportunity to study the history of the world. A chronological approach cultivates the knowledge, skills, and attitudes needed to function effectively in an interdependent, diverse world. The courses focus on the historical process and global themes by utilizing primary sources and documents. The period emphasized in Global History I is the pre-historic era to 1750 A.D. In Global History II, 1750 to the present time will be covered.

10th Grade Courses

L123/P722 Global History II
1-credit 40 weeks
This two-year program for grades 9-10 provides students with the opportunity to study the history of the world. A chronological approach cultivates the knowledge, skills, and attitudes needed to function effectively in an interdependent, diverse world. The courses focus on the historical process and global themes by utilizing primary sources and documents. The period emphasized in Global History I is the pre-historic era to 1750 A.D. In Global History II, 1750 to the present time will be covered.
- Students will be required to take the Framework Regents Exam in Global History and Geography

149 AP World History
1-credit 40 weeks
This course follows the curriculum established by the College Board. It is a course designed to challenge students to work at the college level. Students are required to take both the AP World History examination in May and the Global History Regents Examination in June. The course emphasizes cultural and social systems, the development of international connections, technological developments, social reform and revolution, and the patterns of continuity and change that have evolved over time. In addition, the diversity of interpretations of world history will be examined. Students are expected to complete summer work, which will include reading and written assignments, prior to the start of the course.
- Students will be required to take the Framework Regents Exam in Global History and Geography
- Students who master this course may also consider taking the SAT World History Subject Test in June.

11th Grade Courses

L133/P787 U.S. History & Government
1-credit 40 weeks
Through the study of United States History and government from the 17th century to the present, students will be introduced to political, social, economic, and cultural developments and interactions. Topics include: constitutional principles, institutions of government, foreign policy, economic systems and their political impact, immigration and diversity, citizenship, civil rights and liberties, reform movements, and the historical significance of science and technology. Students will be required to take the U.S. History and Government Regents Examination at the end of this course.

134 AP U.S. History
1-credit 40 weeks
This is a college-level course with emphasis on the English Colonies, American Revolution and Constitution, the Jacksonian Era, Sectionalism, the Civil War and Reconstruction, the Populist and Progressive Eras, the Great Depression and New Deal, and the Cold War. Students utilize a college-level text as well as a number of interpretive readings. Extensive writing and periodic research on a variety of topics are part of the course requirements. Students enrolled in AP U.S. History are expected to complete summer work, which will include reading and written assignments. Students are required to take both the AP U.S. examination in May and the U.S. History Regents in June. Students may also consider taking the SAT U.S. Subject Test in June.
L0138 SUPA American History 101/102
1 credit  40 weeks
This college-level course, taught through a partnership with Syracuse University, offers students the opportunity to earn six college credits while satisfying the US History curriculum required for graduation. The American History sequence is comprised of History 101: American History to 1865 (fall semester) and History 102: The United States Since 1865 (spring semester). In this course students will study American attitudes and beliefs about political democracy, social justice, economic opportunity, equality, and the environment; and students will trace how those attitudes and beliefs have evolved in the first two-and-a-half centuries of American history. Through this course of study, students will not only learn more about the American experience, but they will further develop academic skills involving critical reading, constructing persuasive arguments, using evidence effectively, and honing a variety of crucial analytic skills. At the end of the course, students will be required to take the US History Regents Exam. To receive credit through Syracuse, students must pay a discounted high school fee (2019/20 Tuition - $345 per course, or $690 for both courses).

12th Grade Course
L143/P734 Economics
½-credit  20 weeks
The New York State Department of Education requires that every student complete a 1/2 unit of Politics and a 1/2 unit of Economics to meet graduation standards. The Economics program will introduce students to the three primary components of the state curriculum; macroeconomic theory, entrepreneurship, and personal finance. Students will examine the basic concepts of the three components with an emphasis on the interdependence of the American economy with that of the 21st century world. Students must take this course or its approved alternate course in order to graduate.

L157/P735 Politics
½-credit  20 weeks
This course addresses the knowledge, skills, and attitudes that are necessary to ensure full participation in the political processes at the local, state, national, and global levels. The students are provided the opportunity to enhance the skills and knowledge learned in other courses. They will use the best current technology in the analysis of public issues in developed and emerging democratic societies. Students must take this course and 1/2 unit of Economics (or an approved alternate course) in order to graduate.

148 AP Macroeconomics
1-credit  40 weeks
This Advanced Placement course will give students a through understanding of the principles of economics that apply to an economic system as a whole. It will offer an intensive examination of rationale economic decision-making that would in turn lead to more informed and economically literate citizens. Topics will include basic economic concepts, measurement of economic performance, national income and price determination, economic growth factors, and international finance, exchange rates, and balance of payments. Emphasis will be placed on the study of national income and price determination and will help develop a student’s familiarity with economic performance measures, economic growth, and international economics. NOTE: This course satisfies New York State Department of Education curricular requirements in politics and economics. All enrolled students will be expected to take the Macroeconomics AP exam.

P150 AP Human Geography/Politics
1-credit  40 weeks
This course will cover the nature and perspective of geography; population its density, distribution and scale, growth and decline over time, and population movements; cultural patterns and processes the concept and definition of cultures, the impact on the environment of cultural practices and cultural landscapes; political organization of space territories, the evolution of contemporary political patterns and challenges to inherited political territorial arrangements; agriculture and rural land use – development and diffusion of agriculture, rural land use and settlement patterns; modern commercial agriculture; industrialization and development – growth and diffusion of industrialization, contemporary patterns and impacts of industrialization and development; cities and land use – origin and evolution of cities, functional character of contemporary cities, built environment and social space. NOTE: This course satisfies New York State Department of Education curricular requirements in politics and economics. All enrolled students will be expected to take the Human Geography AP exam.
Social Studies 12 Internship Courses

P159 Social Studies | WISE

1-credit 40 weeks

Students have the option to participate in a second semester senior internship that offers English and social studies credit when they choose WISE. Admission is by application at the end of 11th grade. Internships run from February through June and include 8-10 hours per week at the site, as well as a research project and a presentation. Students in the WISE program will be representing the school in public, so it is important that the participants understand that they must demonstrate good character and good decision-making skills. Serious discipline or academic failures may prevent a student from becoming a part of or remaining in this program. This course satisfies the 1/2 credit of required senior social studies, Participation in Government. NOTE: Students enrolled in this class must also enroll in course 044 English (WISE.)

L162 Internship/Politics

½-Credit 20 weeks

This course offers a work-based learning opportunity to assist students with the link between school and careers. During the first ten weeks, the course will prepare students for an internship experience through a variety of activities including work place issues, resume writing, the employment process, etc. Students will then have the opportunity to obtain awareness of specific careers by working as interns with mentors in their related field of interest. This course satisfies the 1/2 credit of required senior social studies, Participation in Government.

NOTE: Students enrolling in this course must also sign up for the following courses: 045-English 12 Internship and 533-Internship/Work Study

Social Studies Alternative 12th Grade Credit

P147 AP European History

1-credit 40 weeks

This course focuses on European history starting with the Renaissance. There is a special emphasis on the history of ideas and the forces that promote or hinder social change. Course requirements place a heavy emphasis on reading, writing, and analyzing historic trends. Students may be expected to complete summer work, which may include both reading and writing assignments. NOTE: In order to satisfy New York State Department of Education requirements for graduation, students must be concurrently enrolled in Course 183, Independent Studies Economics and Course 187 Independent Student Politics. All enrolled students will be expected to take the AP European Exam.

183 Independent Studies Economics

½ credit 20 weeks

This course may only be taken in conjunction with AP European History and AP Human Geography in order to meet NYS graduation requirements.

187 Independent Studies Politics

½ credit 20 weeks

This course may only be taken in conjunction with AP European History in order to meet NYS graduation requirements.

Social Studies Electives ~ Grades 9 - 12

161 Debate

1 Credit 40 weeks

This course is designed for active member of the Lakeland District Debate Team. In order to be enrolled in the class, the student must be committed to a minimum of ten weekend debate tournaments and participate in the locally managed tournaments through the end of March. Students may be enrolled through each year of high school. Designed to formalize the competitive element of the Lakeland District Debate program, students are expected to meet the schedule of coaching and training session set in a calendar of monthly events. Meetings and practices are generally scheduled after schools, twice each week, depending on the student’s specific level of experience. Beginning students are trained in the rudimentary processes of debate. Intermediate students are exposed to advanced theory and developmental research techniques. Advanced students are offered more complex research opportunities and innovative approaches to both theory and practice of debate. All experienced debaters are expected to assist in the training of lesser-experienced debaters and by judging at tournaments designed for younger debaters.

145 Psychology

½-credit Grades 10-12 20 weeks

This course will cover the methods of human psychology. Through group projects, Internet sources, discussions, outside readings, and independent study, students will explore a variety of topics. The following topics will be discussed: psychological perspectives; developmental psychology; personality, psychological testing; treatment of psychological disorders. The course is designed to promote critical and informed thinking and communication about human behavior.
151 AP Psychology
I-credit  Grades 11-12  40 weeks
This course will examine the methods of psychology; the biological basis of behavior; sensation and perception; learning and cognition; motivation and emotion; developmental psychology; personality; testing and individual differences; abnormal psychology; the treatment of psychological disorders; and social psychology. Students are expected to take the AP exam in May. Recommendation: Completion of Course 146 Psychology is recommended. Some courses may be offered in alternate years. Please consult your Guidance Counselor for more information.

0163 Women’s Studies
½ credit  Grades 10 – 12  20 weeks
This course introduces students to an in-depth study of women’s issues around the world. There will be a focus on the political rights and the cultural influence of contemporary women in the United States. Current issues will be central to this discussion. Readings will come from various sources. Class discussion and participation are key elements of the class. The course offers students an opportunity to participate in a unique educational experience.

L144/P737 Wars That Changed the World  L-only
½-credit  Grade 10-12  20 weeks
This course includes an in-depth study of the causes and effects of war. Past sessions have included discussion of the American Revolution, the Napoleonic Wars, World War I, and World War II. For each war we will investigate causes, technology used, strategy, tactics, the life of the common soldier, the impact of the war on civilians, and the impact of the war on the world. Methods of study will include the reading of first-hand accounts, historical novels and non-fiction works of your choosing; class discussion; library and archival research; lecture; movie analysis; playing tactical war games; listening to music and looking at art; and studying artifacts.

L172/P736 Film and American Culture
½ credit  Grade 11-12  20 weeks
An introduction to film as a medium that can be read, and which also reflects its culture and time. Confined to American examples, this course will introduce students to the terminology of film criticism. It will then examine various genres of film e.g. comedy, the escapade, musicals, film noir, and political films. Students will be expected to have parental/guardian permission to view the selected films.

L0159 History and Politics of the Modern Middle East
½ credit  Grade 11-12  20 weeks
This course focuses on the modern history and politics of the Middle East, beginning with the decline of the Ottoman Empire and the emergence of the Arab nationalist movement of the interwar period. The formation of the state of Israel and the conflicts surrounding it will be discussed as well as the Islamic states of Iran and Afghanistan. The modern conflicts in Iraq, Afghanistan, and Syria will also be discussed in regard to the global implications.

P154 Introduction to Criminal Justice
½-credit  Grades 11 - 12  20 weeks
In this course, students will obtain an awareness of the entire criminal justice system, from the point when a crime is committed through sentencing the offender of the crime. The specific units include: classification of crime, causes of criminal behavior, police, courts, attorneys and judges, trials, sentencing and corrections. We also include a unit on special issues today, including juvenile justice, homeland security and cybercrime. It will meet the needs of those students who aspire to careers in the criminal justice field. Students will enhance their knowledge of the legal system and learn about the law, their rights as citizens, civil responsibilities, and the U.S. Constitution.

P0153 SUPA Sports Management: Principals & Contemporary Issues in Sport Management
I credit  Grade 11-12  40 weeks
This college-level course, taught through a partnership with Syracuse University, offers students the opportunity to earn three college credits. This course introduces students to sports management concepts and sectors through an examination of problems and issues faced by contemporary sport managers. Unique characteristics of sport and resulting social and ethical responsibilities of sports managers will be discussed. In addition to the use of traditional teaching methods to deliver basic sports management concepts, students are required to complete a comprehensive, hands-on project that demonstrates their comprehension of the different sectors of the industry covered throughout the semester. To receive credit through Syracuse, students must pay a discounted high school fee (2019/20 Tuition + $345 per course).
P158 AP Comparative Government & Politics
½-credit  Grades 11-12  20 weeks
This course introduces students to the political history and theories of Britain, Russia, China, Nigeria, Mexico, and Iran. For each country students will study the history and political developments in the 20th and 21st centuries; reactions to change and modernization; ideology; political socialization; current political structure and processes; current government policies; globalization; democratization; political change; public policy; and citizen-state relations. Students will take the AP exam in May. Following the exam students will concentrate on college-level presentations.

061 Learning Center
This non-credit course is mandated by New York State Educational Law for any student whose test score on the New York State assessments in Social Studies falls below the state reference points. Other students who need academic assistance may be scheduled into the program to receive academic support in any subject area, to build study skills, and to learn test-taking skills.

OC21 | 21st Century Skills for College & Career Readiness

♦ Brain Games | Fall Semester
Why can’t I remember the answers for the exam? How can I get along better with the people in my life? How does my teenage brain work and why? This course will examine the latest research related to the adolescent brain and how to most effectively use it to remember, focus, plan, and communicate with others.

♦ Introduction to Anthropology | Fall Semester
Anthropology has been described as an investigation into who we are now, where we came from, and how we got to be the way we are today. In this course, students will be introduced to this “holistic” social science and gain an understanding of what culture is, how it is similar and different for humans living in groups, and how it can be identified and compared.

♦ Beyond Mindfulness | Spring Semester
The Beyond Mindfulness course was designed to help students create the space in their lives for authentic learning and self-discovery through exploring the foundational concepts of mindfulness and mediation.

♦ Fake News & Other Hot Topics | Spring Semester
Fake news, Trolls, and bots have influenced and changed the way we view and understand the world around us. In this course, students will explore the surprising history of propaganda fake news, the fracturing of modern media, and the 24-hour news cycle.
The Science Department seeks to develop in its students a lifelong appreciation of science and its processes in the natural world. Students will develop techniques of self-directed learning and the collaborative skills necessary for working in a group setting to reach common goals. They will work with equipment and materials in a safe laboratory environment. Students will be able to demonstrate an ability to pose problems, collect and analyze relevant data, make unbiased observations in the natural world, formulate realistic solutions, and draw meaningful conclusions.

Director of Curriculum: Patricia Viggiano

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Important Note Regarding Class Selection

Students are not on a prescribed Academic Track and may move from a Non-Honors Course to an Honors/College/AP Course in any grade; however, please note that the student’s academic performance and teacher recommendation are critical factors in determining placement.

We encourage all students to challenge themselves academically and any decision must be balanced with the student's overall well-being and future goals.
9th Grade Courses
The Living Environment
All courses in this area deal with the study of living organisms. Topics include cell structure and function, biochemistry, animal and plant biology, human anatomy and physiology, reproduction and development, genetics, evolution and ecology. Regents and Honors living environment courses have a lab requirement, which must be met to be able to take the Regents exam. One Living Science is required for high school graduation.

L223/P747 Living Environment
1-credit 40 weeks
This course provides a fundamental knowledge of the biological sciences. Lab and classroom topics include cell theory, plant and animal biology, biochemistry, genetics, evolution, human physiology, reproduction, and ecology. Satisfactory completion of a laboratory requirement is necessary to take the Regents examination.

224 Living Environment Honors
1-credit 40 weeks
The topics of cell biology, biochemistry, genetics, evolution, botany, human anatomy and physiology, reproduction and development, and ecology are presented in greater depth in this course than in the regular biology course. Advanced genetic topics will be included. Individualized projects are an integral part of the curriculum. Students must be highly motivated and capable of independent work. Satisfactory completion of a laboratory requirement is necessary to take the Regents examination. Students who master this course may consider taking the SAT Subject Test in Biology in early June. Additional independent student preparation is required prior to sitting for any SAT Subject Test.
Recommendation: It is recommended that a student has achieved an 85 or better in their Earth Science class and achieved at least an 85 on the Earth Science Regents exam.

10th Grade Courses
The Physical Setting
Earth Science
The Earth Science courses have four major areas of emphasis: astronomy, oceanography, geology, and meteorology. Through the study of the planet, which we inhabit, students use scientific processes such as quantitative measurement, critical observation, interpretation of data, and drawing conclusions. All Earth Science courses have a lab requirement that must be met to pass the course and to take the Regents examination. One Physical Science is required for high school graduation.

Chemistry
These courses are concerned with the structure and changes of matter and the relationship with energy. Topics include atomic structure, organization of the elements, chemical bonding, the solution process, states of matter, chemical reactions, and nuclear chemistry. All chemistry courses have a lab requirement, which must be met before sitting for the Regents exam. Successful completion of Chemistry course is usually required to pursue a major in any field of Science as well as: Physician, Physical Therapy, Physician’s Assistant, Pharmacy, Nursing, Dentistry, Veterinary Medicine, Engineering, or Forensics.

Physics
All of the physics courses involve the study of the transformations of matter and energy. Physics is the study of energy and the basic forces in the universe. All of the physics courses involve the study of the transformations of matter and energy. They all have a laboratory requirement that must be met before the student may take the Regents examination. Students who are college-bound are encouraged to take a Physics course in their high school program. It is recommended that students who take four years of science enroll in physics.

L772/P231 Connections to Chemistry
1-credit Grades 11-12 40 weeks
This introductory course will cover four perspectives that define chemistry: historical discoveries, methods of science, real world connections and laboratory competency. Students will model major discoveries, learn basic laboratory analysis techniques and apply these to organizing and identifying chemicals that are involved in everyday life. Topics will include: Discovering the atom, states of matter, nuclear energy and medicine, polymers and hydrocarbons, and quantitative chemistry. Prerequisite: Satisfactory completion of one Regents science exam and passing the Living Environment course.
L771/P203 Earth Science

1-credit  40 weeks
This course covers the following topics through the investigative approach including: geology, an in-depth study of rocks and minerals and Earth's interior, weather and climate trends, and astronomy (the solar system and Earth's motions). Students in this course obtain much of their information from lab exercises. Classes meet eight periods per cycle. The Earth Science Regents Exam is given at the completion of the course. Satisfactory completion of a laboratory requirement is a prerequisite for taking the Regents exam.

204 Earth Science Honors

1-credit  40 weeks
Earth Science Honors is an accelerated laboratory course which integrates an in-depth study of Earth's properties and processes. The course will focus on plate tectonics, volcanism, earthquakes, glaciation, orogeny, topography, geologic history and the formation of rocks and minerals. Also included in this course is a study of meteorology, weather phenomena, and climate. Lastly, Earth's place in the universe will be explored. Classes meet 8 periods per cycle. The Earth Science Regents Exam is given at the completion of the course. Satisfactory completion of a laboratory requirement is a prerequisite for taking the Regents exam. Recommendation: Successful completion of Living Environment with an 85 average or above and mastery (85) on the Living Environment Regents.

233 Chemistry

1-credit Grade 10-11  40 weeks
This course provides students a solid understanding of chemical principals and skills that are needed for college. The study of chemistry involves the study of matter, its composition, structure, properties, and the changes it undergoes. There is a mathematics component to the course which requires intricate algebra skills which will be used to quantitatively define chemical relationships and reactions. As an upper level science class, it is significantly more challenging than previous courses. Classes meet 8 periods per cycle. The Regents exam is required at the end of the course and constitutes 20% of the final average. Satisfactory completion of a lab requirement is a prerequisite before sitting for the Regents exam. Prerequisite: Students must have achieved a passing grade in an algebra course and at least one science Regents exam. Recommendation: Students should also be enrolled in or have completed Geometry.

234 Chemistry Honors

1-credit Grades 10-11  40 weeks
Honors Chemistry is a rigorous introductory chemistry course. This course is designed to meet the needs of students seeking a more stringent academic challenge than offered by the Regents program. Students must have a high level of achievement of algebra and mathematical skills. The emphasis of the course is on understanding the chemistry concepts and the intricate details. The course covers in-depth conceptual and mathematical treatment of all Regents areas with extensions into topics required for the SAT II Subject Test and preparation for AP Chemistry. The rigor of the course reflect a movement towards college level work. The honors activities are advanced in concept, critical thinking, and self-motivation. The Regents exam is required at the end of the course and constitutes 20% of the final average. Satisfactory completion of a lab requirement is a prerequisite before sitting for the Regents exam. Students who master this course may consider taking the SAT Subject Test in Chemistry in early June. Prerequisite: Students must have achieved a passing grade in an algebra course and at least one science Regents exam. Recommendation: A student should have successfully completed Algebra 2/Trigonometry course or be concurrently enrolled in the course. Students should have also achieved an 85 or better in Earth Science and Living Environment courses and an 85 or better in the Algebra 1 course.

11th Grade Courses

233 Chemistry

1-credit Grade 10-11  40 weeks
This course provides students a solid understanding of chemical principals and skills that are needed for college. The study of chemistry involves the study of matter, its composition, structure, properties, and the changes it undergoes. There is a mathematics component to the course which requires intricate algebra skills which will be used to quantitatively define chemical relationships and reactions. As an upper level science class, it is significantly more challenging than previous courses. Classes meet 8 periods per cycle. The Regents exam is required at the end of the course and constitutes 20% of the final average. Satisfactory completion of a lab requirement is a prerequisite before sitting for the Regents exam. Prerequisite: Students must have achieved a passing grade in an algebra course and at least one science Regents exam. Recommendation: Students should also be enrolled in or have completed Geometry.
234 Chemistry Honors

1-credit  Grades 10-11  40 weeks
Honors Chemistry is a rigorous introductory chemistry course. This course is designed to meet the needs of students seeking a more stringent academic challenge than offered by the Regents program. Students must have a high level of achievement of algebra and mathematical skills. The emphasis of the course is on understanding the chemistry concepts and the intricate details. The course covers in-depth conceptual and mathematical treatment of all Regents areas with extensions into topics required for the SAT II Subject Test and preparation for AP Chemistry. The rigors of the course reflect a movement towards college level work. The honors activities are advanced in concept, critical thinking, and self-motivation. The Regents exam is required at the end of the course and constitutes 20% of the final average. Satisfactory completion of a lab requirement is a prerequisite before sitting for the Regents exam. Students who master this course may consider taking the SAT Subject Test in Chemistry in early June. Prerequisite: Students must have achieved a passing grade in an algebra course and at least one science Regents exam. Recommendation: A student should have successfully completed Algebra 2/Trigonometry course or be concurrently enrolled in the course. Students should have also achieved an 85 or better in Earth Science and Living Environment courses and an 85 or better in the Algebra I course.

L772/P231 Connections to Chemistry

1-credit  Grades 11-12  40 weeks
This introductory course will cover four perspectives that define chemistry: historical discoveries, methods of science, real world connections and laboratory competency. Students will model major discoveries, learn basic laboratory analysis techniques and apply these to organizing and identifying chemicals that are involved in everyday life. Topics will include: Discovering the atom, states of matter, nuclear energy and medicine, polymers and hydrocarbons, and quantitative chemistry. Prerequisite: Satisfactory completion of one Regents science exam and passing the Living Environment course.

267 Forensics 1

½-credit  Grades 11-12  20 weeks

268 Forensics 2

½-credit  Grades 11-12  20 weeks
This course will explore a variety of areas in forensic science including collecting and analyzing physical evidence. Students will use chemical and biological techniques and equipment to examine blood, fibers, fingerprints, DNA, and other types of residues and materials left at crime scenes. Different material will be studied each semester. Students may enroll for both semesters or for Forensics I only. A local examination will be given at the end of each semester. Recommendation: It is recommended that students successfully complete Living Environment and Earth science. Prerequisite: Forensics I must be completed before enrolling in Forensics II.

Science Electives
Though only 3-Years of Science is required for graduation, we recommend that all students who plan to attend College after high school to continue with Science Courses through 12th Grade.

264 Science Research

1-credit  Grades 9-12  40 weeks
This course gives students the opportunity to pursue original, independent research in an area of their choice. The course prepares students to design, implement, and present their research to the public through competitions including Intel STS, Siemens, ISEF, JSHS, and others. Students may enroll for all or part of four years and two summers working with a mentor scientist from the academic and/or business worlds. SUNY at Albany credits (up to 12) are awarded if portfolio criteria are met. Recommendation: Strong interest, evidence of disciplined work habits, a student essay, and teacher recommendation are necessary for participation in this course.

243 Physics

1-credit  Grades 11-12  40 weeks
Physics is the study of energy and the basic forces in the universe. Topics include mechanical motion and forces, heat, wave phenomena, electricity, magnetism, light, and atomic energy. The final exam in this course is a district created exam. The Regents exam is optional. Satisfactory completion of a laboratory requirement is a prerequisite before sitting for the Regents exam. The course is very experiment (hands-on) oriented. Recommendation: Students must have successfully completed Algebra 2/Trigonometry or Algebra 2/Trigonometry Honors. Students must also have completed their living environment requirement and two years commencement level science courses.
0274 Astronomy
½-credit  Grades 11-12  20 weeks
This course introduces you to the composition and structure of the universe. Astronomy is the scientific study of the contents of the entire Universe. This course will provide the student with a study of the universe and the conditions, properties, and motions of bodies in space. The content includes, but is not limited to, historical astronomy, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars. A local exam is given at the end of the course.

L270 Meteorology
½-credit  20 weeks
Students will look at the forces that drive our weather systems and how our world is shaped by our weather. We will look at the phenomena of tornadoes, lightning, hurricanes, thunderstorms and snowstorms. Students study these phenomena using real time weather data bases obtained via the Internet and recording weather instruments of the Lakeland Weather Club. Students are expected to write research papers and make class presentations. A local exam is given at the end of the course. Recommendation: It is recommended that students have successfully completed Earth Science and taken one additional science course. Satisfactory completion of one Regents Exam in Science is also recommended.

L275 Oceanography
½-credit  20 weeks
This course offers an introduction to marine science including marine biology, marine meteorology, physical and chemical oceanography, marine biology, and ecology. Lab experience and field trips are included. A local examination is given at the end of the course. Recommendation: It is recommended that students have successfully completed Living Environment and have taken one additional science course. Satisfactory completion of one Regents Exam in Science is also recommended.

P210 Human Anatomy and Physiology
1-credit  Grades 11-12  40 weeks
Human Anatomy and Physiology is a laboratory-based course that will enable students to understand the structures and functions of the human body. Students will use many of the Science and Engineering practices. They will analyze and interpret data, develop and use models, and be introduced to biotechnology. This class is aimed at students who are interested in a career in medicine, nursing, health care, or physical therapy. The teacher will use a variety of resources to encourage student exploration into the various aspects of anatomy and physiology. Recommendations: 2 years of Science completed. It is strongly recommended that the student had attained mastery level (a score of 85 or higher) on the Living Environment Regents.

P0811 Environmental Science
1-credit  40 weeks
This course examines environmental and social impacts of industrial society and policy responses. We will explore current trends in industrialization, urbanization, and globalization, analyze the impacts these trends have on human health, environmental sustainability, and equity, and then examine a range of options available for responding to current problems. The course will present key trends in both domestic and international contexts. In particular this course will examine (1) industrial pollution and climate change; (2) agriculture and food shortages; (3) protecting ecosystems; (4) societies’ waste including e-waste (5) the looming water crisis and (6) sustainable cities. Through these issues, we will explore underlying processes and drivers of environmental degradation. Finally, we will analyze opportunities and barriers to policy responses taken by governments, international institutions, corporations, non-governmental organizations, consumers, and impacted communities.

P278  Environment and Society
1-credit  40 weeks
This course examines environmental and social impacts of industrial society and policy responses. We will explore current trends in industrialization, urbanization, and globalization, analyze the impacts these trends have on human health, environmental sustainability, and equity, and then examine a range of options available for responding to current problems. The course will present key trends in both domestic and international contexts. In particular this course will examine (1) industrial pollution and climate change; (2) agriculture and food shortages; (3) protecting ecosystems; (4) societies’ waste including e-waste (5) the looming water crisis and (6) sustainable cities. Through these issues, we will explore underlying processes and drivers of environmental degradation. Finally, we will analyze opportunities and barriers to policy responses taken by governments, international institutions, corporations, non-governmental organizations, consumers, and impacted communities.
246 AP Physics 1

1-credit Grades 11-12 40 weeks
This course is the equivalent of a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. The course prepares students for the AP Physics 1 examination (non-calculus-based course). Students who have a high interest in science and who plan on majoring in any area of science or engineering in college will find this course useful and challenging. This course follows the Advanced Placement curriculum established by the College Board. Class meets eight periods per cycle. **Recommendation:** It is recommended that a student has achieved an 85 or better in Chemistry and scored an 85 or better on the Chemistry Regents. Students should have successfully completed Algebra 2/Trigonometry or Algebra 2/Trigonometry Honors.

247 AP Physics 2

1-credit Grades 11-12 40 weeks
This course is the equivalent of a first-semester college course in algebra-based physics. AP Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills. This course requires that 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices. Class meets eight periods per cycle. **Recommendation:** Students should have had AP Physics 1 or a comparable course. It is recommended that a student has achieved an 85 or better in Chemistry and scored an 85 or better on the Chemistry Regents. Students should have successfully completed Algebra 2/Trigonometry or Algebra 2/Trigonometry Honors.

263 AP Biology

1-credit Grades 11-12 40 weeks
AP Biology is a college-level biology course. Biology AP covers all areas of biology but to a greater depth than covered in both the Regents and Honors courses in Grades 9/10. This course is recommended for those students planning to major in science or pre-med in college. This course follows the curriculum established by the College Board and prepares students for the AP Biology exam. The AP Program requires that have successfully completed high school courses in biology and chemistry. This requirement is due to the advanced nature of the study of the complex biological systems. Students who qualify based upon their examination scores may receive college credit and/or course waivers. There is a district evaluation at the end of the course. Students who master this course may consider taking the SAT Subject Test in Biology in early June. **Prerequisite:** The student must have passed a chemistry course. **Recommendation:** It is recommended that a student has an 85 or better in Chemistry and an 85 or better in Living Environment R or H or teacher approval. This course should not be used as a substitute for Physics.

261 AP Chemistry

1-credit Grades 11-12 40 weeks
AP Chemistry Course is designed to be a college level course. The course covers many aspects of chemistry on a more quantitative level than in other courses. Students who plan to major in science, math, or pre-med in college will find this course useful and challenging. The course follows the Advanced Placement curriculum established by the College Board and prepares students for the AP examination. Students who qualify based upon their examination scores may receive college credit and/or course waivers. Classes meet eight periods per cycle. **Recommendation:** Students who master this course may consider taking the SAT Subject Test in Chemistry in early June. The AP Chemistry course is designed to be taken only after successful completion of a first course in high school chemistry. **Prerequisite:** Students must have passed a previous Chemistry course. **Recommendation:** A student has achieved an 85 or better in Chemistry-Honors course or approval of teacher. This course should not be used as a substitute for physics. (Add in) recommendations. The students should have passed Algebra2/Trig and concurrently enrolled in Pre-Calculus.

265 AP Environmental Science

1-credit Grades 11-12 40 weeks
This course is an introductory college-level course. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. This course follows the curriculum established by the College Board and prepares students for the AP Environmental exam. Students who qualify based upon their examination scores may receive college credit and/or course waivers.
**Recommendation:** It is recommended that a student completes Earth Science and Living Environment and achieves an 85 or better. This course can be taken concurrently with Chemistry R or H. **PLEASE NOTE:** Summer academic assignments are required due to the breadth of content in this course. Related assessments will be conducted at the start of the school year. Assignments can be found on the school’s website, and texts can be picked up during the Regents Exam week in June.

**061 Learning Center (Science)**
This **non-credit** course is mandated by New York State Educational Law for any student whose test scores fall below the state reference points. Other students who need academic assistance may be scheduled into the program to receive academic support in building study skills and learning test-taking skills.

**Career & Technical Education Courses that Satisfy SCIENCE Requirement**

**277 Robotics – Full Course Description in CTE section**

*1-credit*  
Grades 10-12  
40 weeks

Robotics Engineering is a hands-on, fully interactive course one-year course studies the design, construction, and programming of various self-directed robots and can be used as **1-credit** towards diploma requirements in Science.

**280 Principles of Engineering**

*L-only – Full Course Description in CTE section*  
*1-credit*  
Grades 11-12  
40 weeks

This introductory course is an integrative, hands-on project-based set of case studies, which will convey some of the key concepts and principles, skills, and techniques, and attitudes underlying engineering and can be used as **1-credit** towards diploma requirements in Science.

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**New Visions & OC21 Course Offerings @ PNWBOCES**

**New Vision**

- **New Visions Health** takes place in two local hospitals where students shadow hospital personnel from all departments.

- **New Visions Engineering** students explore the world of engineering through hands-on projects that integrate academics and engineering concepts. Job shadowing opportunities and site visits are coordinated throughout the school year enabling the students to see first-hand the activities and responsibilities related to various engineering disciplines.

**OC21 | 21st Century Skills for College & Career Readiness**

- **Adventures in Programming | Spring Semester**  
This course will introduce students to the basics of software engineering and programming languages. Students will work collaboratively on applying the skills they learn to design and create basic computer programs. They will explore how to annotate text using HTML, create and evaluate basic computer algorithms, and explore syntax and grammar underlying many programming languages. This introductory course will allow students to explore several visual programming languages.
The philosophy of the Mathematics Department is that all students should complete four years of mathematics at the high school level. While the courses presented below appeal to the broadest spectrum of students, Honors and Advanced Placement courses deal with math on a more abstract level. Special Education core courses (700 series) are listed in that section of this catalog.

**Director of Curriculum:** Christopher Ruggiero

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**Important Note Regarding Class Selection**

Students are not on a prescribed Academic Track and may move from a Non-Honors Course to an Honors/College/AP Course in any grade; however, please note that the student’s academic performance and teacher recommendation are critical factors in determining placement.

We encourage all students to challenge themselves academically and any decision must be balanced with the student’s overall well-being and future goals.
9th Grade Courses

308 Algebra 1A/1B Extended
1-Credit 40 weeks
This is the first year of a three-year sequence in the New York State Learning Standards sequence. This course is designed for students who will benefit from extended instruction in the Algebra 1 program. While the content of this course matches that of Algebra 1 (0307), the additional instructional time afforded through this course allows for different pacing and skill development opportunities through this foundational math curriculum. Students will take the Algebra 1 Regents Exam in June.

307 Algebra 1
1-Credit 40 weeks
This is the first year of a three-year sequence in the New York State Learning Standards sequence. The main focus of this course is Algebra and its many applications that can be found in functions, quadratic expressions/equations, graphing linear and quadratic equations, and statistics. Students will take the Algebra 1 Regents Exam in June.

312 Geometry
1-Credit Grades 9-10 40 weeks
This is the second year of a three-year sequence in the New York State Learning Standards sequence. The main focus of this course is Geometry, including congruence, proof, constructions, similarity, basic Trigonometry, extending to three-dimensions, connecting Algebra and Geometry through coordinates, and circles. This course will prepare students for a local final exam in June.

313 Geometry Honors
1-Credit Grades 9-10 40 weeks
This is a rigorous course comprised of the New York State Learning Standards designed for students who are able to thrive in an environment of challenging work and higher-level problem solving. This course is part of a four-year math experience which will afford students the opportunity to take a college bearing course in AP Calculus in their senior year. The main focus of this course is congruence, similarity, geometry of two and three-dimensions, transformations, constructions, trigonometry and geometry of the circle. The course will culminate in a final exam.

10th Grade Courses

717 Topics in Geometry and Algebra 2
1-Credit Grades 10-12 40 weeks
Designed for students who have completed Course 716, this one-year course is designed to provide an appropriate course of study for students seeking a third-year offering in mathematics. Intended for the college-bound student, this course includes topics that will further develop skills in Geometry and Algebra. These may include properties of triangles, quadrilaterals, and three-dimensional figures, coordinate geometry, transformations, rational expressions, operations, and equations, quadratic equations, exponents, probability, statistics, and an introduction to Trigonometry. A departmental examination is administered in June. After successful completion of this course, students have the opportunity to enroll in Course 718 or Course 335.

312 Geometry
1-Credit Grades 9-10 40 weeks
This is the second year of a three-year sequence in the New York State Learning Standards sequence. The main focus of this course is a variety of applications in Geometry, including congruence, proof, constructions, similarity, basic Trigonometry, extending to three-dimensions, connecting Algebra and Geometry through coordinates, and circles. This course will prepare students for a local final exam in June.

313 Geometry Honors
1-Credit Grades 9-10 40 weeks
This is a rigorous course comprised of the New York State Learning Standards designed for students who are able to thrive in an environment of challenging work and higher-level problem solving. This course is part of a four-year math experience which will afford students the opportunity to take a college credit bearing course in AP Calculus in their senior year. The main focus of this course is congruence, similarity, geometry of two and three-dimensions, transformations, constructions, trigonometry and geometry of the circle. The course will culminate in a local final exam in June.

320 Algebra 2/Trigonometry
1-Credit Grades 11-12 40 weeks
This is the third year of a three-year sequence comprised of the New York State Learning Standards. The first half of this course includes topics such as rational expressions, exponents, logarithms, irrational and imaginary numbers, functions, advanced quadratic equations, sequences and series, and statistics. The second half of this course focuses on trigonometric functions, graphs, equations and applications. This course will culminate with a local final exam in June.
327 Algebra 2/Trigonometry Honors

This is a third year of a three-year sequence comprised of the New York State Learning Standards. This course includes topics such as Trigonometry (trigonometric graphing, applications and equations), rational expressions (operations and equations), irrational and imaginary numbers, advanced quadratic equations, functions, exponents, logarithms, sequences and series and some statistics. There will also be supplemental topics that are unique to the Honors curriculum. This course will culminate with a local final exam in June.

11th Grade Courses

335 Advanced Algebra

This course builds on algebra skills as well as appropriate sections of statistics, geometry, and trigonometry, representing a solid mathematics course for students in their third year of math. The course is designed to hone further the mathematical skills of students. It also serves to extend and improve critical thinking skills in a manner compatible with the Common Core State Standards at the Commencement Level. This course will culminate with a local final exam in June. After successful completion of this course, students have the opportunity to enroll in Course 320 or Course 341 for a fourth year of mathematics.

322 Algebra 2/Trigonometry

This is the third year of a three-year sequence comprised of the New York State Learning Standards. The first half of this course includes topics such as rational expressions, exponents, logarithms, irrational and imaginary numbers, functions, advanced quadratic equations, sequences and series, and statistics. The second half of this course focuses on trigonometric functions, graphs, equations and applications. This course will culminate with a local final exam in June.

323 Algebra 2/Trigonometry Honors

This is a third year of a three-year sequence comprised of the New York State Learning Standards. This course includes topics such as Trigonometry (trigonometric graphing, applications and equations), rational expressions (operations and equations), irrational and imaginary numbers, advanced quadratic equations, functions, exponents, logarithms, sequences and series and some statistics. There will also be supplemental topics that are unique to the Honors curriculum. This course will culminate with a local final exam in June.

342 Pre-Calculus

This course follows Course 320 and is the fourth course in the integrated mathematics sequence. The course prepares students for calculus by extending algebraic, trigonometric, and analytical geometry skills. The course also introduces students to matrices.

344 Pre-Calculus AB

This course follows Course 327 and is the fourth course in the integrated mathematics sequence and prepares juniors for AP Calculus by extending algebraic, trigonometric, and analytical geometry skills. The course introduces students to matrices and the theory of limits necessary for the introduction to the derivative. A graphing calculator is required. Students who master this course may also consider taking the Mathematics Level 2 SAT Subject Test in June.

348 Pre-Calculus BC

This course follows Course 327 and is the fourth course in the integrated mathematics sequence. The course prepares juniors for AP Calculus BC by extending algebraic, trigonometric, and analytical geometry skills and introduces students to matrices and the theory of limits necessary for the introduction to the derivative. A graphing calculator is required. Students who master this course may also consider taking the Mathematics Level 2 SAT Subject Test in June. Only students demonstrating significant achievement with a 1st Semester Average in Algebra 2/Trigonometry Honors (Math 327) of 95% will be recommended for this course.
Math Electives – Grades 11 - 12

Though only 3-Years of Math is required for graduation, we recommend that all students who plan to attend College after high school to continue with Math Courses through 12th Grade.

523 Math and Financial Applications
1-Credit Grades 11 - 12 40 weeks
This course is for students who have successfully completed two full years of high school math. It fulfills one of the three units of mathematics required for a Regents diploma and was designed to meet commencement level math standards. It will prepare students for both college-level business programs and help them understand the complex financial world they will encounter after graduation.

341 College Algebra: Functions and Models L-only
1-Credit Grade 12 40 weeks
Designed to be a fourth year offering to follow Course 335, this course is for the college-bound senior. The curriculum focuses on a variety of different functions, with a blend of algebraic and graphic approaches to their development. Three college credits may be earned through completion of this course, which is offered through the Westchester Community College ECE program. Credits transfer to SUNY schools and many other colleges as well. There is a cost per credit of approximately $60. This course will culminate with a local final exam in June.

351 Calculus
1-Credit Grade 12 40 weeks
A one-year introduction to college calculus, this course is recommended for students wishing to use mathematics in their career or for further study in college. Course topics include elements of differential and integral calculus, limit theory and analytic geometry. The intent of this course is to provide a foundation for seniors who intend to enroll in calculus in college.

352 AP Calculus AB L-only
1-Credit Grade 12 40 weeks
This course is comparable to college calculus. Derivatives, integrals, limits, approximation, applications and modeling are some of the themes that will be studied extensively. The course follows the curriculum established by the College Board and prepares the student to take the Advanced Placement exam in May. A graphing calculator is required. Recommendation: It is recommended that students complete Math342 or Math 346 before enrolling in this course.

354 AP Statistics L-only
1 credit Grade 11-12 40 Weeks
Statistical analysis is used in a broad range of fields including business, psychology, medicine, and engineering. Students will learn about observational and experimental study design. They will learn methods for data analysis and interpret their results. The syllabus is College Board approved and students must take the AP exam in May. A graphing calculator is required. Recommendation: It is recommended that students complete Math322 or Math 323 before enrolling in this course.

061 Learning Center (Math)
This non-credit course is designed for students who require remediation as a function of their performance in Grade 8 Math, or who have scored below 65% on the Algebra 1 Regents examination.

Career & Technical Education Courses that Satisfy MATH Requirement

507 Introduction to C++ Computer Programming – Full Course Description in CTE section
1-Credit Grades 9 - 12 40 weeks
This course is designed for the student with little or no computer programming background. College credits are offered through Westchester Community College and can be used as 1-credit towards diploma requirements in Math.

509 AP Computer Science – Full Course Description in CTE section
1 credit Grades 11 - 12 40 weeks
The AP Computer Science course emphasizes procedural and data abstraction, object-based programming methodology, algorithms, and data structures and can be used as 1-credit towards diploma requirements in Math.

OC21 | 21st Century Skills for College & Career Readiness

♦ Sports Management, Media, Marketing, and Analysis | Fall Semester
Does sports management have a role in your future? How can you decide if a sports-related major is the right choice for you? What might work in a sports-related field be like? Where does mathematics fit within the fabric of this industry? This course will help answer these questions and more.
World Languages | Languages Other Than English (LOTE)

The Lakeland School District’s Department of World Languages believes that all students can learn a second language and should be encouraged to do so. We prepare students to understand and appreciate other cultures, and to function at their appropriate levels and abilities. One high school credit in a World Language is required for graduation. However, it should be noted that New York State’s graduation requirement in a World Language (one year) is lower than most college and universities minimum entrance requirements. New York State has eliminated the Spanish and Italian Regents’ exams. There will be a local exam given at the end of the school year that will meet the requirements for the Advanced Regents diploma.

Coordinator: Mindy Albert-Bergen, Foreign Language Teacher – Lakeland Copper Beech MS
Coordinator: Kelly Rampolla, Foreign Language Teacher – Lakeland Copper Beech MS

### Important Note Regarding Class Selection

Students are not on a prescribed Academic Track and may move from a Non-Honors Course to an Honors/College/AP Course in any grade; however, please note that the student’s academic performance and teacher recommendation are critical factors in determining placement.

We encourage all students to challenge themselves academically and any decision must be balanced with the student’s overall well-being and future goals.
9th Grade Courses
421 Spanish 1
440 Italian 1
Level 1 - The purpose of a second language at this level is to introduce a student to basic speaking, listening, reading, and writing skills. Emphasis is on speaking within everyday real-life situations. By the end of the course the student should be able: to tell time, order a meal, ask for directions, describe the weather, etc.

422 Spanish 2
441 Italian 2
Level 2 - At this level, reading of short passages and brief writing exercises assume increased importance. While listening and speaking continue to be stressed, more time is devoted to increasing the student’s use of vocabulary and essential structures in preparation.

10th Grade Courses
422 Spanish 2
441 Italian 2
Level 2 - At this level, reading of short passages and brief writing exercises assume increased importance. While listening and speaking continue to be stressed, more time is devoted to increasing the student’s use of vocabulary and essential structures in preparation.

423 Spanish 3
442 Italian 3
Level 3 - Great emphasis is placed at this level on the ability of students to understand and express themselves orally in the language. A broader experience in reading and writing is provided to prepare students to take a school-based comprehensive final exam in June.

11th Grade Courses
423 Spanish 3
442 Italian 3
Level 3 - Great emphasis is placed at this level on the ability of students to understand and express themselves orally in the language. A broader experience in reading and writing is provided to prepare students to take a school-based comprehensive final exam in June.

LOTE Electives ~ Grades 11 - 12
Though only 1-Year of LOTE is required for graduation, we recommend that all students who plan to attend College after high school complete their Language Sequence through Level 3 of the same language.

430 Spanish 4 Language and Culture A & B*
450 Italian 4 Language and Culture A & B*
Level 4 - LANGUAGE AND CULTURE
Language and Culture A focuses on North American and is taught through a variety of materials, media and technology, emphasis is placed on preparing students to function in a multicultural world. Various aspects of communication skills are further enhanced through the acquisition of advanced conversational and written skills. In addition, the learning experience will be enriched by exposure to the culture(s) of the nations in which the language is spoken. * Depending on enrollment, Level B (Europe) will be offered as the 2nd year in a two-year non-sequential curriculum. It is recommended that students enrolling in this course pass a Level 3 course and final exam in either Italian or Spanish.

425 Spanish 4H
444 Italian 4H
Level 4 HONORS - This course is the foundation for the Advanced Placement course. The emphasis is on the AP test requirements including sophisticated vocabulary, grammar and usage, speaking, listening writing and advanced readings. The course is appropriate for the highly motivated learner and requires the approval of the Level 3 teacher. This course is a prerequisite for the Advanced Placement course. Students enrolling in this level course may be eligible to earn college credit through Westchester Community College.
432 Spanish 5H
455 Italian 5H
Level 5 HONORS - This college level course provides students with an opportunity to develop their linguistic as well as communicative competencies in Spanish or Italian based on readings of a literary and cultural nature while providing for additional review of grammar in the context of the reading selections. Students enrolling in this level course may be eligible to earn college credit through Westchester Community College. Recommended: Completion of 4H or teacher approval.

427 AP Spanish Language
446 AP Italian
ADVANCED PLACEMENT (AP) LANGUAGE – The Advanced Placement course for Spanish and Italian is intended for the highly motivated language student. The courses are the equivalent of an advanced level college grammar course. The AP courses are based on the curriculum established by the Educational Testing Service and prepare students for the AP exam in May. All students enrolled in the AP class must take the examination in May. There is also a districtwide evaluation in June. Students who successfully complete this course should also consider taking the corresponding SAT Subject Test.

*These courses may be offered in alternate years depending on enrollment. This is a non-sequential curriculum. Language and Culture A is not a prerequisite for enrollment in Language and Culture B.
The ARTS | Art & Music

An artistically literate citizen has the knowledge, skills, and understanding to actively engage in the arts throughout their lives. The intrinsic nature of the arts leads to and promotes a civilized, sustainable society. Artistically literate graduates are career and college ready, capable of understanding and addressing the needs of society, and participating in a global economy.

Through creating, performing, responding, and connecting in the arts, students generate experiences, construct knowledge, and build a more integrated understanding of self and community. They explore and express ideas, feelings, and beliefs about the past and present; discover new ideas; and begin to envision possible futures. Through careful study of their own and others’ art, students explore and make sense of the broad human condition across time and cultures.

Please note: 1 Credit of the Arts (i.e., Visual, Music, Theater, Media, and Dance) satisfies the ARTS requirement for graduation. Lakeland CSD only offers ARTS courses in Visual Arts and Music.

VISUAL ARTS

An art class is an adventure! It is an environment of independent discovery, creative challenges and relaxing fun. Art classes build confidence, focus, and problem-solving skills, an understanding of differences, cooperation, and perseverance. The study of art involves your feelings, intuition and curiosity, as well as your observations of the outside world. Whether you want to discover your hidden talents, make new friends, or start to uncover your creative side, trying an art class is always a smart decision.

Art Coordinator: Mary Barresi, Art Teacher – Lakeland HS

9th Grade Courses

550 Studio Art
1-credit Grades 9-12 40 weeks
Studio Art introduces students to a variety of art experiences and helps them discover their talents. Art experiences include drawing, design, painting, clay work, printmaking, sculpture, etc. This is a full-year foundation course required for some art electives and meets the art requirement for graduation.

Visual Arts Electives ~ Grades 10 - 12

Lakeland & Walter Panas High School

551 Drawing
1-credit Grades 10-12 40 weeks
Drawing class introduces students to the important basics of becoming better at drawing. Students will discover new techniques and refine drawing skills, as well as develop their own creative ideas using a wide variety of materials (i.e., pencil, pastel, pen & ink, and charcoal). Drawing skills and creativity will be gained with quality portfolio pieces produced. Open to all levels, from beginning to experienced art students.

558 Painting
1 credit Grades 11-12 40 weeks
Students explore the language of painting and painting techniques through color, composition, history and aesthetics. Students complete original works of art on canvas, which adds to their portfolio development. Recommended: Drawing

552 Watercolor
½ credit Grades 10-12 20 weeks
Students learn watercolor techniques and create original works of art using this exciting medium.

553 Ceramics 1
½ credit Grades 10-12 20 weeks
Hand-building techniques are explored in this beginner’s fun and innovative studio class. Students will create works of art using the pinch, coil, and slab methods. Students will be encouraged to use their imaginations to design original works of art in a creative and supportive environment.

554 Ceramics 2
½ credit Grades 10-12 20 weeks
Students will learn how to throw on the potter’s wheel, experiment with different types of glazes and explore a variety of effects. Projects will include bowls, cups, and vases in addition to students’ own original designs. This is a vigorous and exciting course that entails patience and imagination. Prerequisite: Ceramics 1
560 Digital Art & Design 1
1/2-credit  Grades 10-12  20 weeks
Students will create artwork and learn special effects using Adobe Photoshop, Mac computers, drawing tablets, and digital cameras. Using photos and simple drawings, students will create amazing images through Photoshop program tools and special effects. Basic art concepts, illustration & storytelling, and graphic design are all introduced.

561 Digital Art & Design 2
1/2-credit  Grades 10-12  20 weeks
Level 2 Digital Art & Design builds upon student’s visual special effects knowledge, and challenges their creativity, problem solving, illustration, and visual storytelling skills. Class uses Photoshop program and Mac computer lab. Prerequisite: Digital Art & Design 1

565 Printmaking
1/2-credit  Grades 10-12  20 weeks
Students will explore both traditional and experimental printmaking techniques and use a variety of methods for multiplication of images created. Projects might include linocuts, woodcuts, monoprints, and relief prints.

555 Sculpture 1
1/2-credit  Grades 10-12  20 weeks
Students will explore the 3rd dimension in this class. They will experience how to build three-dimensional projects using clay, plaster, wire, wood, found objects or paper-mache. Introduction to processes such as modeling, casting and carving is also explored.

568 AP Studio Art/Portfolio Development
1-credit  Grades 11-12  40 weeks
This combination course is intended for students who are interested in producing college-level work in art and/or continuing their studies of art in college. Students are challenged to explore many different avenues including painting, drawing, computer graphics, photography, printmaking, ceramics, and sculpture. **Students enrolled in Portfolio Development** will be expected to complete a portfolio of work at the highest high school level but do not submit a portfolio for evaluation to the College Board in May and will not receive A.P. credit for the course. **Students enrolled in AP Studio Art** will be expected to submit a portfolio of work along with a brief written component to the College Board for evaluation. Students participating in the program will be expected to invest a significant amount of time and commitment to their work. Work is based on quality (the development of a sense of excellence), concentration (an in-depth personal commitment to particular artistic concerns), and breadth (a variety of experiences using formal, technical, and expressive means.). Prerequisite: Studio Art and Studio in Drawing or Teacher approval.

**Lakeland High School Only**

L566 Photography 1
1-credit  Grades 10-12  40 weeks
A good photograph can be captured with a camera. A great photograph is made in the darkroom. Students will develop their vision in this basic black and white photography course, and will learn to use the camera, process film, produce prints, and finish their work for presentation and portfolio. A 35-mm (manual/SLR) camera is required. Additional materials will also be required.

L567 Photography 2
1/2-credit  Grades 11-12  20 weeks
Students will pursue their personal ideas and creative goals while fine-tuning their darkroom skills. Students will experience a variety of photographic and fine art techniques to enhance their black and white photographs and will be inspired to go beyond the traditional to help build an exciting portfolio. Prerequisite: Photography 1

L557 Wearable Art
1/2-credit  Grades 10-12  20 weeks
This is a hands-on art class geared towards art that is wearable and/or functional. Students might create t-shirts with iron-on transfers, brands and logos that will be applied to clothing, paint jean jackets, skateboard decks, or snowboards and furniture. Learning to make colorful tie-dye clothing, and exploring fashion trends through the decades, will help students make art that they can wear with pride.

L525 Cinematography
1-credit  Grades 10-12  40 weeks
This course is designed to introduce students to the art of film production. Students will get a thorough overview of terminology and camera operation while also studying history, composition, lighting, camera movement and special effects in creating their own movies. Students will learn and use iMovie to edit.
Walter Panas High School Only

P566 Digital Photography 1
1-credit Grades 10-12 40 weeks
Students can take their phone photos to the next level. In this course, students will use a variety of photographic skills including composition, Adobe Photoshop editing/manipulation, lighting techniques and Epson professional quality printing. Having your own Digital SLR camera is preferred but not mandatory. At the completion of the course, portfolio work will be developed.

P567 Digital Photography 2
1/2-credit Grades 10-12 20 weeks
In this class, students will take their photographic foundation skills to the next level while building their photography portfolio. Individual artistic style will be enhanced throughout this course. Advanced lighting techniques and processing skills will also be explored.

P556 Jr./Sr. Art Experience: Studio Art
1 credit Grades 11-12 40 weeks
This course provides students with a wealth of artistic experiences in areas such as drawing, sculpture, ceramics, painting, computer graphics, and printmaking. Students can expand on knowledge previously learned in Studio in Art with regards to the Elements of Art and Principles of Design while at the same time, explore new techniques and materials. This course can fulfill the New York State requirement for Art upon approval for students in grades 11-12.

MUSIC
The Lakeland and Walter Panas High School Music Departments provide all students with a comprehensive, standards-based music education. The study of music fosters artistic development, critical thinking, intellectual curiosity, and the pursuit of life-long learning. Through performing and responding to music, all students develop individual and intrapersonal skills, realize a sense of belonging, and establish connections to the community. Students are encouraged to enroll in both performance-based and generalized musical courses throughout their four years of high school.

Please note: 1 Credit of the Arts (i.e., Visual, Music, Theater, Media, and Dance) satisfies the ARTS requirement for graduation. Lakeland CSD only offers ARTS courses in Visual Arts and Music.

Music Coordinator: Richard Dashnaw, Music Teacher – Lakeland Copper Beech MS
Music Coordinator: Jamie Stroffolino, Music Teacher – Walter Panas HS

9th Grade Courses

0577 Studio Music
1-credit Grades 9-12 40 weeks
Studio Music is a course designed to survey the various music electives at Lakeland and Walter Panas High Schools. This course will provide an overview of several specializations within the area of music, that may include (but not be limited to): Music Theory, Music Technology/Digital Recording, Musical Theatre, Vocal Production, and Basics of Guitar/Woodwind/Brass/String instruments. Students will have a unique, hands-on experience learning about many disciplines within music education and the music industry. This course is designed for students who have an interest in music but may not have participated in a performing ensemble at the middle and elementary school levels; or, for students who would like to study music in new and additional ways.

587 Music Theory 1
1-credit Grades 9-12 40 weeks
This course will explore musical construction. Students will be able to read, write, and analyze music upon completion of this course. It introduces students to music history and appreciation. Previous music reading experience is helpful, but not required.

581 Concert Band
1-credit Grades 9-12 40 weeks
This performing group is open to all students from grades 9-12 who play a band instrument. Students will have the opportunity to study and perform a wide variety of music from different genres and cultures. The band will perform mostly NYSSMA level 3 & 4 pieces and will work to further develop performance skills and music appreciation. Attendance is required at small group music lessons which occur on a rotating schedule throughout the week. Students must practice outside of school on a weekly basis and are expected to provide care of their own (or school rented) instruments and accessories. Students will be graded on participation in rehearsals, work assigned in music lessons, and attendance at performances.
583 Orchestra  
1-credit  Grades 9-12  40 weeks
The instrumental composition of the Orchestra is determined on the basis of student interest and technical competence. The String Orchestra is composed of qualified string players. The Symphony Orchestra is composed of selected members from the bands who per-form with the String Orchestra. The Orchestra performs independent concerts in addition to the regular school concert series as printed in the school calendar. Attendance is required at all rehearsals and con-certs. Regular home practice is required. Students are expected to pro vide and care for their own instruments and accessories. The appropriate director must approve any exceptions.

585 Chorus  
1-credit  Grades 9-12  40 weeks
This course includes membership in chorus. In this course emphasis is placed on vocal technique through the study of a variety of musical genres including classic choral literature, musical theater selections, and popular music. The choral program offers a student a traditional choral experience with the option of a smaller ensemble performance. Students with substantial and minimal vocal experience are encouraged to enroll in this course. During the year, students are required to sing individually as well as in a group setting; participate in the regular school concert series; and attend daily rehearsals. Individual participation at the maximum level directly relates to the success of that level of the ensemble. Select choral students may have the opportunity to participate in the Intermediate All-County, Area All-State, NYSSMA Festivals, and competition choir.

L582 Ninth Grade – Orchestra  
1-credit  Grades 9  40 weeks
This course is offered according to specific building enrollment needs.

Music Electives ~ Grades 10 - 12

Lakeland & Walter Panas High School

596 Wind Ensemble  
1-credit  Grade 10-12  40 weeks
Wind Ensemble is open to exceptionally talented band musicians from grades 9-12. Acceptance into the group is by audition. This group will perform mostly NYSSMA level 5 & 6 pieces. The instrumental composition of the ensemble will vary based on student proficiency and director's choice. Attendance is required at small group music lessons which occur on a rotating schedule throughout the week. Private music instruction and participation in the NYSSMA music festival are encouraged. Students are expected to provide care of their own (or school rented) instruments and accessories. Students will be graded on participation in rehearsals, work assigned in music lessons, and performances. Audition Process: Students will be auditioned using the NYSSMA level 5&6 rubric. This includes scales, sight reading, and a prepared piece (supplied by the teacher) one month before the audition.

593 Music Plan A  
½-credit  Grades 9-12  40 weeks
This is an independent study course. To join this class, qualified students may apply during the first semester to the performing group director or to the teacher who provides the school lessons. Credit is earned by:
1. Practicing a minimum of 5 hours per week
2. Turning in record substantiating additional practice each quarter
3. Performing four recitals on a NYSSMA Grade 4-6 level (one at the end of each quarter) to be judged by the music faculty. Students must take at least one music lesson each week or two lessons per month. Monthly lesson instruction must equal a minimum of two hours. Students must complete at least 36 weeks of study during the school year. Other requirements are designated in the Music Plan A Requirements Packet that is available from the Music Department. 
Note: This course does not meet the NY State Regents requirements for music and art.
Prerequisite: Permission of the faculty member assigned to this course and/or the department coordinator is required.
- Enrollment in Instrumental/Vocal music is strongly advised, but not required.

594 Music Technology & Digital Recording  
1-credit  Grades 9-12  40 weeks
Students will study fundamentals of music notation and instrumental transpositions to learn how to arrange and create music scores, orchestrations, and background tracks for TV and film. Students will also study fundamentals of acoustics, sound reinforcement, and digital recording in order to gain a better understanding of how to record and reproduce live performances, lectures, and other presentations. This course meets the NY State Regents graduation requirement for music or art.
591 AP Music Theory
1-credit Grades 10-12 40 weeks
The focus of the AP Music Theory course is to foster growth in the student's ability to understand and recognize the basic process of music that one would hear or see in a musical score. A student who enrolls in this course will develop aural, sight-singing, writing, composition, and analytical skills in music. Technical computer applications are part of this course and are often used for independent work. Upon completion of this course, students will be prepared to take the AP Music Theory Exam. This course presents a solid foundation for students who are planning to major in music in college; however, it is not limited to those students. AP Music Theory will encourage all students to advance their musicianship through the analytical process of music, culminating in a deeper understanding of music through theory with an expected outcome of advanced levels of personal musicianship. Prerequisite: Successful completion of Music Theory I or teacher approval.

Lakeland High School ONLY
L592 Musical Theatre and Drama
1-credit Grades 9-12 40 weeks
Students will be introduced to the background and history of classic operatic works through the accomplishments of contemporary American musical composers. Curriculum content will also include the technical aspects of a production, the auditioning process, and producing and directing a musical. Selected scores, scripts, and libretti will be used to study plot development and characters with experiences resulting in classroom and workshop performances. Students are required to take part in all performance-based activities and take written exams. Culminating field trips will be taken as often as possible. The only prerequisite for this course is a genuine love of theatre and/or the desire to learn about it. This course meets the N.Y. State Regents requirement for music or art.

Walter Panas High School ONLY
P599 Philharmonia Orchestra
1-credit Grades 9-12 40 weeks
This advanced orchestra course is designed for students who have demonstrated a capacity for developing advanced listening, auditory skills and advanced knowledge of string techniques, musical literacy and orchestral performance. This is a year-long course that meets daily. Students will perform a variety of challenging orchestral music and will perform NYSSMA level V and VI music exclusively. Philharmonia is open to exceptionally talented students by audition. The ability to perform with strong tone, intonation and vibrato is a prerequisite and strong musical aptitude is required.

P597 Chamber Choir
1-credit Grades 9-12 40 weeks
This advanced vocal course is designed for students who have demonstrated a capacity for developing advanced listening, auditory skills and advanced knowledge of vocal techniques, musical literacy, and choral performance. This year-long course meets daily. Students will perform a variety of challenging vocal music and NYSSMA level V and VI music exclusively. Chamber Choir is open to exceptionally talented students by audition. The ability to read music is a prerequisite and the ability to part-sing is strongly encouraged.

P598 Guitar
1-credit Grades 9-12 40 weeks
Guitar is a one-year course covering the basics of the instrument. Students will learn music notation, chord symbols, and standard guitar tablature. Students will learn how to play various styles of music including classical, jazz, blues, and rock. Students will also learn a brief history of the instrument, and its respective musical styles and cultural impacts. The goal of the course is to gain an advanced appreciation of music through learning guitar. There will be opportunities to play solo and in small and large group settings. Students will also learn improvisation, songwriting, and how to perform in a standard rock band. The course will culminate with a final recital.
Career and Technical Education

This department offers a curriculum designed to assist all students in developing business concepts, computer skills, and family/consumer awareness that will provide a smooth transition to post-secondary education and/or employment. The program provides skills that students can utilize in their personal lives to be productive/responsible citizens and knowledgeable consumers. It provides students with a unique blend of electives and sequence opportunities.

**Coordinator:** Clare Novak, Computer Teacher – Lakeland Copper Beech MS

### Engineering & Technology Career Field
- **9th Grade**
  - Computer Information System
  - Gaming & App Development
- **10th Grade**
  - Cybersecurity
  - Visual Basic
  - Introduction to C++
- **11th Grade**
  - Introduction to Engineering
  - Robotics
  - HTML5 Web Design
- **12th Grade**
  - AP Computer Science

### Business & Informational Systems Career Field
- **9th Grade**
  - FBLA (L)
  - Computer Information Systems
  - Gaming & App Development
- **10th Grade**
  - Cybersecurity
  - HTML5 Web Design
  - Introduction to C++
  - Math Financial Apps
- **11th Grade**
  - Business Law
  - Business Ownership & Marketing
- **12th Grade**
  - Accounting
  - Personal Finance

### Humanities Career Field
- **11th Grade**
  - Child Psychology
  - Early Childhood Education I
- **12th Grade**
  - Adolescent Psychology
  - Early Childhood Education II

### Important Note
It is not uncommon for a student to have an interest in several Career Fields. The colored sequence above is only meant as a guide to courses that best prepare a student for Career Field and/or Major in College. As students’ progress in skill & passion, staff from the CTE department will work closely with students and recommend courses that match their career interests.
Engineering & Technology Career Field

People working in this field use technical knowledge and skill to assemble, inspect, design, maintain and repair.

513 Computer Skills
1/2 credit Grades 9-12 20 weeks
This one-semester course is designed to develop keyboarding and word processing skills. The focus is on building the necessary tools that students need for college and the work world. Units of instruction include resumes, cover letters, personal correspondence, letters of application, and research papers using Microsoft Word. Also, students will receive instruction in the advanced presentation features of PowerPoint, and in developing spread-sheets and charts using Excel - a skill colleges expect students to know before enrolling.

517 Computer Information Systems
½ -Credit Grades 9 - 12 20 weeks
Students who enroll in this half year introductory course will learn computer languages and computer programming. This class will fulfill prerequisite for Visual Basic and will provide a strong foundation for other computer science classes. Three SUNY credits are available.

512 Visual Basic Coding
½ -Credit Grades 9 - 12 20 weeks
This semester course in Visual Basic will allow students to learn the fundamental commands and techniques used in programming languages. This is a fun, hands-on, introductory to programming class. Upon completion, students may take Robotics Engineering, C++ Programming, or AP CS A (Java). Prerequisite: Computer Information Systems

514 HTML5 Web Design
½ -Credit Grades 9 - 12 20 weeks
The course is designed to teach students the technology necessary to develop professional, quality, web pages. It will include HTML5 as well as Photoshop CS for enhanced images.

518 Gaming and App Development
½ -Credit Grades 9 - 12 20 weeks
Students in this half year course will have opportunities to code using a variety of applications in the Java programming language. The focus of this class will be on developing high quality, working software that solves real life problems. This course is designed for students who enjoy "Scratch" and other web-based programming tools.

507 Introduction to C++ Computer Programming
1-Credit Grades 9 - 12 40 weeks
This course is designed for the student with little or no computer programming background. The programming language used is Turbo C++. It is strongly recommended that this course be completed satisfactorily before taking AP Programming. College credits are offered through Westchester Community College and are transferable to all SUNY schools as well as many other colleges. Note: Can be used as 1-credit towards diploma requirements in Math

277 Robotics
1-credit Grades 10-12 40 weeks
Robotics Engineering is a hands-on, fully interactive course one-year course studies the design, construction, and programming of various self-directed robots. Students will be able to program robots to move, grab objects, deal with obstacles, run through a maze, react to spoken commands and compete with other robots in competition. Note: Can be used as 1-credit towards diploma requirements in Science

0610 Cyber-Security
1/2 Credit Grades 9-12 20 Weeks
Description: What is cybersecurity? Learn about cybersecurity and its impact; digital citizenship and cyber hygiene; the art of cryptography; software security; networking fundamentals; and the tools necessary to be an informed member of society when utilizing IoT (Internet of Things).

280 Principles of Engineering L-only
1-credit Grades 11-12 40 weeks
This introductory course is an integrative, hands-on project-based set of case studies, which will convey some of the key concepts and principles, skills, and techniques, and attitudes underlying engineering. The course will bring math, science, technology, and technological literacy together. Topics include but are not limited to: definition and types of engineering, communications and documentation, design, engineering systems, strength of materials, materials, and reliability engineering. Note: Can be used as 1-credit towards diploma requirements in Science
509 AP Computer Science
1 credit Grades 11 - 12 40 weeks
The AP Computer Science course emphasizes procedural and data abstraction, object-based programming methodology, algorithms, and data structures. The AP Computer Science Examination requires knowledge of the programming language Java. The exam will continue to cover the fundamentals of computer science taught in first-year college courses. Note: Can be used as 1-credit towards diploma requirements in Math

Business & Informational Systems Career Field
People working in this field support public and private enterprises by managing people and information.

524 Accounting
1-Credit Grades 11 - 12 40 weeks
This course provides students with an understanding of financial accounting principles at the introductory college level. Students will gain a thorough knowledge in the applications of fundamental accounting concepts and procedures. It is an essential course for those students planning to major in Accounting, Finance, and/or Business Administration in college. The course utilizes a college textbook and course syllabus. Students will prepare all assignments both manually and, on the computer, using accounting software.
College credits (4 SUNY credits) are offered through Westchester Community College and are transferable to all SUNY schools as well as many other colleges.

532 Business Law
1-Credit Grades 11 - 12 40 weeks
The emphasis of this course is on your legal rights and obligations. Business Law includes the study of criminal, tort, and family law as well as individual rights. Learn how to enter into a valid contract, protect yourself with warranties, how to write a will, and know your rights in the workplace. In addition, discover how to purchase and insure your car as well as use credit and write checks. Guest speakers and field trips will supplement the curriculum.
College credits (3 SUNY Credits) are offered through Westchester Community College and Mercy College. Credits are transferable to all SUNY schools as well as many other colleges.

534 Business Ownership and Marketing
1-Credit Grades 11 - 12 40 weeks
Entrepreneurship and Marketing will be the focus of this course. Students will analyze various companies’ marketing and business strategies to see what makes some successful and others fail. Students successfully completing this course are provided with the skills necessary to start and manage a small business. They will also have a solid foundation in concepts that may be utilized in college-level studies in Business Administration.
College credits (6 SUNY Credits) are offered through Westchester Community College and are transferable to all SUNY schools as well as many other colleges.

520 Personal Finance
½-credit Grade 12 20 weeks
Are you smart with your money? Learn how to manage your finances responsibly in today’s world. This course is intended to introduce high school students to the myriad of concepts applicable to personal finance. Whether you are going to college or starting out in the workforce after graduation, learn to budget and manage your money to create personal wealth. Should I buy a vehicle or is leasing cheaper? Should I buy my own place, or should I rent? If you do not know the answers to these questions and more, then this course is for you.

L548 FBLA (Future Business Leaders of America)
1/2-credit Grades 9-12 20 weeks
FBLA (Future Business Leaders of America) is the largest career student organization in the world. Students will prepare for college and careers through a variety of leadership, community service, and academic activities. Students will develop leadership, communication, presentation, and teamwork skills while building a portfolio of accomplishments that will serve them well in college and the work world. Students will earn recognition on the local, state, and national levels through the Business Achievement Awards, open-up their access to scholarships, and opportunities to travel.
Humanities Career Field

People in this field participate in literacy, cultural, artistic, athletic, and entertainment ART Courses.

**535 Child Psychology**

½ -Credit Grades 10 - 12 20 weeks

Students taking this course are provided with a better understanding of children from birth through school-age and themselves as individuals. The course includes prenatal care as well as the responsibilities of parenthood; physical, cognitive, social/emotional development, and interaction with infants, children, and adolescents. This course is beneficial for students currently working with children or considering careers in early childhood.

**L538 Adolescent Psychology**

½ -Credit Grades 10 - 12 20 weeks

This course is designed to help teenagers gain a better understanding of themselves, their families, and relationships. Students will learn about strategies to help them cope with their stresses and problems of daily living. They will learn how to deal effectively with those around them - peers, family members, younger children, and other adults. Students will also investigate issues facing teens today. The course will help students discover and strengthen behaviors that will improve their interaction with others.

**536 Early Childhood Education I**

1-Credit Grades 11 - 12 40 weeks

In this course, students will begin to learn the basics of working in and early childhood education class setting. Through their readings, they will learn about the social, emotional, cognitive and physical development of preschool children ages 3-5 and assist the high school senior student teachers in the preparation of activities for the pre-k program. They will also be required to do projects on classroom design, writing storybooks and doing observations. Juniors may take this course for one period, and seniors may take it for two periods.

**537 Early Childhood Education II**

2-Credits Grade 12 40 weeks

In this course, the senior students will have the opportunity to plan activities for the preschoolers in the areas of English Language Arts, Math, Science, Arts & Crafts, and developing gross motor skills as well as using the SmartBoard for interactive, hands-on learning activities. Students will have the opportunity to develop a testing assessment for pre-kindergarten readiness and act as mentors to the junior assistants. A portfolio must be submitted by the end of the course which will include all work completed for the year. Students will be able to take this course for two periods (2 credits).

**CAREER & TECHNICAL EDUCATION 12th Grade Option**

**Lakeland High School Only**

**L533 Internship/Work Study**

1/2-credit Grade 12 20 weeks

This course offers a work-based learning opportunity to assist students with the link between school and careers. During the first ten weeks, the course will prepare students for an internship experience through a variety of activities including workplace issues, resume writing, the employment process, etc. Students will then have the opportunity to intern and obtain awareness of specific careers by working with mentors in their related field of interest. **NOTE:** Students enrolling in this course must also sign up for the following courses: 045-English 12 Internship and 162-Internship/Politics.

**OC21 | 21st Century Skills for College & Career Readiness**

- **Architecture Across the Centuries – Fall Semester**
  Take a journey across the history of architecture and view architectural examples as both works of art and windows into cultural and engineering developments. In addition to virtual visits to the Great Wall, Aztec and Mayan temples, the Parthenon, European Gothic cathedrals and Japanese ornamental architecture.
PHYSICAL EDUCATION

The Physical Education Program at the secondary level is coeducational. Activities are skill oriented with emphasis on physical fitness and participation on team sports as well as in individual lifetime sports. The secondary program provides more complex activities than those offered in the elementary and middle schools. All students are required to take and satisfactorily complete physical education in order to meet NYS Education Department and Lakeland School District requirements.

District Interscholastic Athletics Department: Daniel Belfi

9th & 10th Grade Courses

660 Physical Education 9 & 10
½-credit Grades 9-10 40 weeks
The physical education program in grades 9 & 10 is skill oriented with emphasis on physical fitness, team, and individual sports.

11th & 12th Grade Courses

670 Physical Education 11 & 12
½-credit Grades 11-12 40 weeks
The physical education program in grades 11 & 12 is more selective than in grades 9 and 10. Students have an opportunity to select a block of activities in which they wish to participate. Emphasis is placed on individual and lifetime activities.

Physical Education Elective

P-687 Personal Fitness
½-credit Grades 9-12 40 weeks
This course will offer a more comprehensive and in-depth approach to one's personal fitness. The course will be considered a Physical Education elective and will include a variety of personal health activities including, but not limited to, cardio-respiratory training, weight training, yoga, etc.

HEALTH

652 Health
½-credit Grades 10-12 20 weeks
The Health curriculum consists of the fundamental concepts of mental, sociological, environmental and community health in addition to first aid and safety. Effects of drugs, alcohol, and tobacco are investigated as important aspects of family living and interpersonal relationships. This course includes a presentation of the current knowledge about AIDS. The course is flexible in sequence and content and is designed to meet the varied needs of students in relationship to their environment and community. The goals are to give accurate health knowledge, help develop positive attitudes, and maintain or initiate constructive behavior. A district exam is given at the end of the course. It is recommended that all students take health in grades 10-11. This course is required for graduation.

Health Elective

L653 Critical Issues in Health Education
½-credit Grades 11-12 20 weeks
Based on the incredible amount of stressors placed on young people today, this course is designed to build upon the knowledge from Health I to continue the development of a healthy teen population. This course will expand the knowledge, attitudes and skills needed for a healthy lifestyle using seminar techniques. The course will include lectures, discussions, guest speakers, field trips, research, and projects. A strong emphasis will be placed on the most compelling and current health issues facing teens today. Participants will be able to explore various health related careers and may do some community outreach as well. Overall, the course objective is to enable the students to make well-informed, educated decisions regarding their health using the most updated information and for the students to acquire and strengthen their own decision making and refusal skills. Prerequisite: Students need to take Course 652 Health before taking this course.
Special Education Courses

The Special Education courses that follow are recommended by the Committee on Special Education (CSE). Each class section offered is dependent on the number of students enrolled in the class. The Special Education core courses (700 series) are listed in their content areas.

715 Algebra 1A
1-credit Grade 9 40 weeks
This is the first of a two-year sequence in the Integrated Algebra program. The topics that will be covered this year are operations with signed numbers, algebraic expressions, trigonometry of the right triangle, geometric figures and statistics. Students will take a departmental final exam in June. Students will take the Integrated Algebra Regents in June of the 2nd year of this program.

716 Algebra 1B
1-credit Grade 10 40 weeks
This is the second of a two-year sequence in the Integrated Algebra program. This course is designed for students who have successfully completed Math 302/715. Topics for this course include quadratic relations and functions, factoring, systems of equations, transformations, algebraic fractions, and probability. Students will take the Integrated Algebra Regents Exam in June.

717 Topics in Geometry and Algebra 2
1-credit Grades 10-12 40 weeks
Designed for students who have completed Course 716, this one-year course is designed to provide an appropriate course of study for students seeking a third-year offering in mathematics. Intended for the college-bound student, this course includes topics that will further develop skills in geometry and algebra. These include properties of triangles, quadrilaterals, and three-dimensional figures, coordinate geometry, transformations, rational expressions, operations, and equations, quadratic equations, exponents, probability, statistics, and an introduction to trigonometry. A departmental examination is administered in June. After successful completion of this course, students have the opportunity to enroll in Course 718 or Course 335.

718 Business Math
1-credit Grades 10-12 40 weeks
This math course fulfills a second or third unit of a non-Regents sequence. Units of study include personal finance, payroll, borrowing money, insurance and assorted business problems.

769 Oceanography
½-credit Grades 10-12 20 weeks
This course offers an introduction to marine science including marine biology, marine meteorology, physical and chemical oceanography, marine biology, and ecology. Lab experience and field trips are included. A local examination is given at the end of the course. Recommendation: It is recommended that students have successfully completed Living Environment and have taken one additional science course. Satisfactory completion of one Regents Exam in Science is also recommended.

770 Ecology
½-credit Grades 10-12 20 weeks
Scientific aspects of the environment are stressed. The course deals with the economics politics and history of the environment. Individual projects will be required. This course can be used as part of the required three-year sequence in science.

775 Forensics
1-credit Grades 11-12 40 weeks
This course will explore a variety of areas in forensic science including collecting and analyzing physical evidence. Students will use chemical and biological techniques and equipment to examine blood, fibers, fingerprints, DNA, and other types of residues and materials left at crime scenes.

724 Reading Skills
1-credit Grades 9-12 40 weeks
This supplementary reading courses involves instruction in a variety of reading strategies with materials from the content area.
L756/P757 – Resource Education
No Credit Grade 9
The Resource Education program is a support service for students with specific learning needs. It is designed to reinforce study skills and academic skills specific to the needs of the individual student. For classified students, the program is driven by Individual Education Program (IEP) goals.

L751/P711 Study Skills
1 Credit – 40 Weeks

750 Resource Education
No Credit Grades 10 - 12
The Resource Education program is a support service for students with specific learning needs. It is designed to reinforce study skills and academic skills specific to the needs of the individual student. For classified students, the program is driven by Individual Education Program (IEP) goals.

L752/P721 Study Skills
1 Credit Grade 10 40 Weeks

L753/P723 Study Skills
1 Credit Grade 11 40 Weeks

NOTE: Study Skill courses are designed to provide individualized and small group instruction for students in the Special Education program.
STRIVE - Special Education at Lakeland High School

Lakeland High School Houses a five to six-year academic and vocational program that strives to empower students with knowledge to enable them to be lifelong learners and productive citizens who can live, work, and enjoy the recreational opportunities in their own communities. Successful completion of this program will qualify a student for a Skills and Achievement Commencement Credential (see Board of Education Policy 512 7.) The Special Education core courses (700 series) are listed in their content areas.

L701 History Skills

L705 Pre-Vocational Skills
This is a modified social studies curriculum that incorporates current events. They will develop an understanding of various cultures, religions, geography, political systems, histories, and the environmental interdependence of all nations and people.

L702 Math Skills
This course provides an individualized math program. Students strive to achieve mastery in the following areas: basic computation, money, use of calculators, telling of time, basic measurement, and basic consumer mathematics. Students’ progress at their own pace.

L703 English Skills
This is an integrated language arts curriculum focusing on improving oral and written language skills. A variety of literary genres are used.

L704 Science Skills
This is a modified general science curriculum that integrates health topics. Topics covered include areas of earth science, environmental, life science, and personal health.

L705 Pre-Vocational Skills
This is a pre-vocational program that emphasizes building work readiness skills through group projects. This program reinforces math, health, and social skills.

L706 Arts in Our Lives
Students will explore the world of music through a variety of hands-on and interactive activities.

L766 Technology in Our Lives
Students will explore the world of technology and its impact on their day to day lives, focusing on skills to assist them with the transition to adulthood.

L699 Project STRIVE
Project STRIVE is a work-study program that seeks to assess a student’s vocational strengths and abilities through a variety of job placements. The program focuses on developing positive job-related behaviors that will enable students to find and maintain employment.

L767 Art In Our Lives
Students will explore the basics of Art through drawing, painting, sculpture and craft activities.
Departmental 3 Program

Lakeland High School houses the Departmental 3 special class program - a 4 to 6-year academic program leading to high school diploma with an optional vocational component for students with specific learning needs requiring a more intensive academic program. Students are placed in the program through the CSE based on their educational needs. In order to assist students in completing the requirements for a high school diploma, courses culminating in a Regents examination are offered over two periods to provide additional instructional time. Individual student needs are accounted for when planning for each student and additional academic supports are implemented as appropriate. The following courses are offered at Lakeland High School through the program (courses marked with an * are two periods):

**Math**

*L794/P795 - Algebra 1A/1B*

2-credits  
40 Weeks

717 - Topics in Geometry and Algebra 2

1-credit  
40 Weeks

**English**

791 - English 9 (1 credit)

792 - English 10 (1 credit)

*793 - English 11 (1 credit)

732 - English 12 (1 credit)

**Science**

*796 - Living Environment (1 credit)

769 - Oceanography (1/2 credit)

770 - Ecology (1/2 credit)

776 - Forensics 1 (1/2 credit)

777 - Forensics 2 (1/2 credit)

**Social Studies**

*797 - Global History 1 (1 credit)

*798 - Global History 2 (1 credit)

*799 - U.S. History & Government (1 credit)

734 - Economics (1/2 credit)

735 - Politics (1/2 credit)
The ACE Academy, housed within Lakeland High School, provides an alternative educational setting for Walter Panas and Lakeland High School students in the 11th and 12th grades who recognize a need for a non-traditional school environment. Students who choose to apply to the ACE Academy have typically faced challenges within their home school of meeting traditional school expectations. Such students are often better able to experience the success of which they are capable through the ACE Academy's smaller community of students, lower student-teacher ratios, individualized instruction, and hands-on, project-based learning approach. Students can earn credit in English, social studies, math, science, and P.E. In addition, students are able to enroll in BOCES Tech programs. Students in the ACE Academy are required to meet all graduation requirements. Although core academic courses in the ACE Academy are designed to meet the needs of 11th and 12th grade students, opportunities may exist for appropriate sophomore applicants as well. For information on application procedures and visiting the ACE Academy, please see your high school counselor.

**Supervisor for Alternative Programs:** Mary Ellen Rafferty
Interscholastic Athletic Activities

**FALL**
- Cheerleading .......................... JV, Varsity
- Men’s Cross Country ................ Varisty
- Women’s Cross Country ............. Varsity Field
- Hockey ................................. JV, Varsity
- Football ............................... JV, Varsity
- Women’s Soccer ....................... JV, Varsity
- Men’s Soccer .......................... JV, Varsity
- Volleyball ............................. JV, Varsity
- Women’s Swimming .................. Varsity (Combined)
- Women’s Tennis ....................... Varsity

**WINTER**
- Ice Hockey ............................ Varsity (Combined)
- Men’s Basketball ..................... Freshman, JV, Varsity
- Women’s Basketball .................. Freshman, JV, Varsity
- Men’s Bowling ........................ Varsity
- Women’s Bowling ..................... Varsity
- Cheerleading .......................... JV, Varsity
- Women’s Gymnastics ................. Varsity (Combined)
- Women’s Indoor Track ............... Varsity
- (Combined) Men’s Indoor Track ... Varsity
- (Combined) Men’s Swimming ....... Varsity

**SPRING**
- Baseball ............................... Freshman, JV, Varsity
- Men’s Golf ............................. Varsity (Combined)
- Men’s Lacrosse ....................... JV, Varsity (Combined)
- Woman’s Lacrosse ................... JV, Varsity (Combined)
- Softball ............................... JV, Varsity
- Men’s Tennis .......................... Varsity
- Women’s Track ......................... Varsity (Combined)
- Men’s Track ........................... Varsity (Combined)

*Note: Combined indicates the teams are district teams representing both Walter Panas and Lakeland High Schools.*
Career & Technical Education Academies @ PNWBOCES

Putnam/Northern Westchester BOCES offers a wide array of learning opportunities to students who want to both develop career skills and earn college credits. The eight academies/small learning communities offer academic subjects such as English, math, science, social studies and P.E. Academy students may attend for one or two years, from two to four hours a day. Successful graduates may obtain certification and/or a Regents Diploma with Technical Endorsement. All academies could be described as supportive smaller learning communities that personalized the education for each student and are a model for curriculum integration: integration between career and technical with academics, intra-curriculum integration within the different pathways of the academy and inter-curriculum integration between the academies.

Students may come to the Tech Center for part of their school day and still be able to take required courses at their high school. Students are also able to participate in extracurricular activities at their high school should they choose to attend the Tech Center.

INTERESTED STUDENTS: Information is available through the Guidance Department at your school or call the Student Services Office at the Tech Center (914 248-2424). Visits to the Tech Center may be arranged upon request. Below is a list of the Tech Academies offered at the Tech Center:

**Business Career Academy**
- Microcomputer Technology
- Communications Career Academy
- Animation & Motion Graphics
- Computer Graphics
- Fashion Design & Merchandising
- Digital Film, Video & Audio Production

**Construction Career Academy**
- New Visions Engineering (Interview Required)
- Architectural Design & Modeling
- Carpentry
- Construction Electricity
- HVAC/Plumbing/Pipe Fitting
- Preservation/Restoration/Commercial Masonry
- Welding

**Health Career Academy**
- New Visions Health (Interview Required)
- Certified Nurse Aide/Home Health Care Aide
- Intro. to Physical Therapy Aide/Rehabilitation
- Law Enforcement/EMS
- Medical Assistant
- Sports Medicine
- Veterinary Science

**Hospitality Career Academy**
- Baking & Pastry Arts
- Culinary Arts
- Teaching Career Academy
- Child Development & Education

**Transportation Career Academy**
- Auto Body
- Auto Mechanics

**Cosmetology Career Academy**
- Cosmetology

**Environmental Science Career Academy**
- Urban Forestry/Arboriculture
Virtual Learning in college has become the norm and college students often take online courses to earn core credits or take that last-minute course so they can graduate on-time. So why not learn the **ins & outs** of an online course from Online Courses for the 21st Century (OC21). The courses are taught by high school teachers throughout Westchester County and utilizes a blended learning approach in which students and staff collaborate through both Online format and 2 whole-class meetings at PNWBOCES.

Make your high school transcript “stand-out” to admissions by demonstrating that you went “above & beyond” the curriculum offered at your high school to pursue a course that interests you, or better prepares you for your Major in college – now that’s Grit!

Interested students will have the opportunity to choose from dynamic online courses designed to expand your knowledge, interest, and experience. Through a consortium of school districts, organized by PNWBOCES, students have the ability to learn alongside teachers and students from across our region. OC21 courses are recommended to students in 10th thru 12th grades. To learn how you can register for an OC21 course, please contact your school counselor at your earliest convenience.

- **Zero to Sixty: Writing Your First Novel** | Fall & Spring Semester
- **You Are What You Eat: The Truth Behind Your Food** | TBD
- **Brain Games: The Psychology of How to Focus, Remember, and Communicate Effectively with the Teen Brain** | Fall Semester
- **Introduction to Anthropology** | Fall Semester
- **Beyond Mindfulness** | Spring Semester
- **Fake News & Other Hot Topics** | Spring Semester
- **Adventures in Programming** | Spring Semester
- **Sports Management, Media, Marketing, and Analysis** | Fall Semester

New Visions Programs
New Visions programs are academically rigorous 1-Year programs for college bound seniors. These programs allow students to earn honors, AP, and college credit while working with industry professionals. Many of the New Visions programs are located at sites where students can watch and learn from field practitioners in their work environment. Students who are interested in participating in New Visions programs must have a strong academic record and commitment to the selected career area. Because of their advanced studies, New Visions programs provide students with a competitive edge when applying for college admission.

- **New Visions Health** takes place in two local hospitals where students shadow hospital personnel from all departments.
- **New Visions Engineering** students explore the world of engineering through hands-on projects that integrate academics and engineering concepts. Job shadowing opportunities and site visits are coordinated throughout the school year enabling the students to see first-hand the activities and responsibilities related to various engineering disciplines.

New Visions students receive academic instruction in English, Government, and Economics. They are eligible to earn up to 6 credits in English from SUNY WCC or Mercy College, 3 credits in Political Power in America from Mercy College, and additional college credits depending on their program.

Students interested in participating in our New Visions programs should apply during their **junior year** of high school to be enrolled for their senior year. Please speak with your school counselor during your Scheduling Appointment.

* This process includes an online application, two letters of recommendation and an interview with both New Vision Staff and LCSD Director of Guidance.

**NOTE:** New Visions & OC21 Courses are listed in the Core Subject areas of this Program of Studies