

## High School



### **CEEB CODE**

To be used for  
Standardized Testing and  
College Applications.

North – 362-022

South – 365-574

## **COURSE SELECTION GUIDE**

**2019 – 2020**

*District Goal: Improve Student Achievement*  
*Students First • Quality Instruction • Time On Task*

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Ms. Gina Kevern, Director of Curriculum  
Mrs. Eileen Bowers, Director of Pupil Services  
Mr. Patrick McKinney, Director of Technology  
Mr. Bill Parkinson, Treasurer

**Board of Education**

**Regular Meetings**  
**2<sup>nd</sup> Monday of the Month**

Thomas Beal, Member  
Brian Jones, Member  
Rena Perchinske, Member  
Margaret Warner, Member  
Amy Zuren, Member

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## **GENERAL INFORMATION**

### **School Day**

- A High School day consists of an eight (8) period day with lunch included.
- The Career Academy school day is divided into blocks of time depending upon the particular career and technical education program. Lunch is provided at the home high school.

### **Attendance**

- Attendance and punctuality are the responsibility of the student and parent(s)/guardian(s).
- By state law, regular attendance is mandatory for all students.
- When a student is absent, a parent/guardian is required to notify the school as early in the day as possible. If a call is not received, a note (signed by the parent/guardian) excusing the student is required. A statement stating the reason for the absence must be included.

### **Minimum Course Load**

Students must take between 5.50 and 6.00 units of credit each school year to ensure meeting the requirement of 21.5 credits necessary for graduation.

- Both required and elective courses must equal the 21.5 credit count. Students are strongly encouraged to take additional credits each year.
- Students who are involved in athletics are responsible for checking that they are scheduled for at least five credits each semester (See OHSSA guidelines).

### **Class Standing**

- To achieve sophomore, junior, or senior class standing, students should have earned the minimum number of credits indicated below:
  - Sophomore Class 5 credits accumulated
  - Junior Class 10 credits accumulated
  - Senior Class 16 credits accumulated
- If a student is in his/her fourth year of high school and is enrolled in a sufficient number of courses, that student will be classified as a senior and become a candidate for graduation.
- All Willoughby-Eastlake courses required for graduation are aligned to the Ohio Department of Education's New Learning Standards and College and Career Readiness standards which are available online at: <http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements>

## Graduation Requirements

For the 2019-2020 school year, all students must complete 21.5 units of high school credit and satisfy one of the three options or pathways for graduation as provided by the Ohio Department of Education.

**These units must include:**

### Graduating Class of 2020

English	4 Credits	English I, II, III and IV
Mathematics	4 Credits	Must include Algebra II or its equivalent
Social Studies	3 Credits	Must include World History, American History, American Government (Satisfies the Economics and Financial Literacy requirements)
Science	3 Credits	Must include one unit of Physical Science, one unit of Life Science, and one unit of Advanced Study in one or more of the following Sciences: Chemistry, Physics or other Physical Science, Advanced Biology or other Life Science, and Astronomy
Health	1/2 Credit	
Physical Education	1/2 Credit	A student who participates in interscholastic athletics, marching band, or cheerleading for at least 2 full seasons may substitute a different 1/2 credit class in any subject for PE credit
Computer Science	1/2 Credit	
Electives	6 Credits	<p>**Elective credits must include one or any combination of:</p> <ul style="list-style-type: none"> <li>• World (Foreign) Language</li> <li>• Fine Arts, Business</li> <li>• Career-Technical Education</li> <li>• Family and Consumer Sciences</li> <li>• Technology</li> <li>• English Language Arts</li> <li>• Mathematics, Science or Social Studies courses not otherwise required</li> <li>• <b>Students must complete at least 2 semesters of Fine Arts taken any time in grades 7-12.</b></li> <li>• Students enrolled in a “Career-Technical track”- interpreted by the ODE as a minimum of one credit or one year in coursework representing coherent sequential Career-Technical content - are exempt from the Fine Arts requirement.</li> </ul>

## GRADUATION REQUIREMENTS 2018 and Beyond Graduates

### The new graduation requirements require all students to:

- Complete Ohio Course Requirements (see previous page)
- Take End of Course Assessments in:
  - Algebra I, Geometry, English I, English II, Biology, American History, and American Government
- Meet one of three pathways (The ODE may establish alternative pathways for graduation; consult with your guidance counselor):
  1. Earn a cumulative passing score of 18 points on the seven (7) end of course of exams. Points are earned as follows:

Advanced Level	5 points
Accelerated Level	4 points
Proficient Level	3 points
Basic Level	2 points
Limited Level	1 point

Of these overall points, a student must earn a minimum of 4 points between the math exams, 4 points between the English exams, and 6 points among the science and social studies exams. In order to obtain 18 points students will have to score above the minimum on several end of course exams.

2. Earn a remediation-free score on the ACT or SAT

ACT		SAT	
English	18	Evidenced Based Reading and Writing	480
Mathematics	22	Mathematics	530
Reading	22		

### 3. Earn a State Board of Education approved, industry-recognized credential

The State Board approved the list of industry credentials a student may use to qualify for a diploma. Earning an approved industry credential and achieving a workforce readiness score on a corresponding job skills test, such as the WorkKeys assessment, is a pathway to a diploma. All credentials must be tied to jobs that are in demand, either statewide or locally. A student can use any credential for graduation that appears on the list during the student's junior year, even if that credential comes off the list during the senior year. A student may always use new credentials added to the list after his or her junior year. **\*Some industry credentialing exams may not be administered until after the graduation ceremony, which would prevent the student from participating in the ceremony.**

#### **High School Grading Scale**

**A- 90% - 100%    B- 80% - 89%    C- 70% - 79%    D- 60%-69%    F- 0% - 59%**

**Honor Roll**- Grade Point Average 3.0 - 3.775

**Principal's List**- Grade Point Average 3.76 – 4.0

#### **Pass/Fail Courses**

- As per W-E Board policy, a student may enroll in a course on a pass/fail basis only when the course is not a requirement for graduation.
- The decision to take a course on a pass/fail basis should be made before the course begins. No more than one course may be taken under pass/fail each semester.
- Pass/fail courses do not count in the cumulative Grade Point Average (GPA).
- The pass/fail course will count for credit in the 21.5 credits needed for graduation, and quarterly grades will appear on the report card which will indicate the student's progress on the A through F scale.
- The A through F scale will be converted to a pass (P) or fail (F) in the final grade.

#### **Report Cards**

- Report cards are posted on PowerSchool each quarter, which spans approximately nine weeks.
- Parents/guardians may access grades and attendance through PowerSchool  
<https://pschool.weschools.org/public/>

#### **Schedule Change Procedures**

- Withdrawal and subsequent placement in a different course will be a limited occurrence and will be an administrative decision.
- Any questions about schedules should be addressed to the appropriate guidance counselor within the first seven (7) days of each semester.



## **Reasons for Schedule Changes**

- Missing a required subject/lunch/credits for eligibility
- Scheduled for fewer than 5.5 credits
- Short credits for eligibility
- Short credits to meet graduation requirements if the student is a senior
- Medical necessity as verified by a physician's statement
- Administrative decisions to balance class size and/or to resolve schedule conflicts and to otherwise meet the needs of individual students under extraordinary circumstances.

## **Accelerated Students**

- In 2006, The Ohio Department of Education passed a new resolution #3324.10 (part of House Bill 66) which now allows an accelerated student to apply for "early graduation" if the student has met all of the state and Willoughby-Eastlake district's requirements for graduation.
  - Student must also meet Ohio Department of Education requirements for graduation.
  - Any student meeting all the criteria for early graduation must state his/her intention in writing to the Guidance Office before the second semester of Grade 11.
  - Students who opt for early graduation are not eligible to take CCP classes after they graduate.

## **Honors Diploma**

The Ohio State Board of Education has established a Diploma with Honors. Students must meet the following criteria:

- The student who completes the high school academic curriculum shall meet all but one of the following criteria:
  1. Earn at least four units of Mathematics which shall include Algebra I, Algebra II, Geometry and another higher level course or a four-year sequence of courses which contains equivalent content;
  2. Earn at least four units of Science including one unit of Physics and one unit of Chemistry;
  3. Earn four units of Social Studies;
  4. Earn three units of a World (Foreign) Language (must include no less than two units for which credit is sought), i.e., three units of one language or two units each of two languages;
  5. Earn one unit of Fine Arts;
  6. Maintain an overall high school grade point average of at least 3.5 on a four-point scale up to the last grading period of the senior year; or
  7. Obtain a composite score of 27 on the American College Test's (ACT) assessment
  8. (excluding the optional writing test) or a combined score of 1210 on the College Board's SAT verbal and mathematics sections (excluding the required writing section).

## **Career Technical Honors Diploma**

The Ohio State Board of Education has established a Diploma with Honors. Students must meet the following criteria:

- A student who completes an intensive Career-Technical education curriculum shall meet all but one of the following criteria:
  1. Earn at least four units of Mathematics which shall include Algebra I, Algebra II, Geometry and another higher level course, or a four-year sequence of courses which contains equivalent content;
  2. Earn at least four units of Science, including two advanced sciences;
  3. Earn four units of Social Studies;
  4. Two Units of World Language
  5. Earn four units in a Career-Technical education program that leads to an industry-recognized credential, results in an apprenticeship or is part of an articulated career pathway which can lead to post-secondary credit. If the student's program design does not provide for any of these outcomes, then the student must achieve the proficiency benchmark established for the applicable Ohio career-technical competency assessment or the equivalent;
  6. Achieve the proficiency benchmark established for the Ohio Career-Technical Competency Assessment (available at <http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements/Honors-Diplomas/Career-Tech-Honors-Diploma> or equivalent assessment aligned with state-approved and industry validated technical standards;
  7. Maintain an overall high school grade point average of at least 3.5 on a 4.0 scale up to the last grading period of the senior year; or
  8. Obtain a composite score of 27 on the American College Testing Service's (ACT) assessment (excluding the optional writing test) or a combined score of 1280 on the College Board's SAT verbal and mathematics sections (excluding the score obtained on the required writing section) or 6 or higher on Reading for Information and 6 or higher on Applied Mathematics on WorkKeys Assessment
  9. Complete a Work Experience and document the experience in a portfolio specific to the student's area of focus
  10. Develop a comprehensive portfolio of work based on the student's field experience or topic that relates to the student's area of focus.

For more information on the Career Tech Honors diploma requirements go to <http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements/Honors-Diplomas/Career-Tech-Honors-Diploma>

### **Stem Honors Diploma**

The Ohio State Board of Education has established a Diploma with Honors. Students must meet the following criteria:

- The student who completes the high school academic curriculum shall meet all but one of the following criteria:
  1. Earn five units in Math
  2. Earn five units in Science
  3. Earn three units in Social Studies
  4. Earn three units of one world language or no less than two units of each of two world languages studied.
  5. Earn one unit in Fine Arts
  6. Earn two units with a STEM focus
  7. Earn 3.5 on a 4.0 scale
  8. Earn 27 or higher on ACT or 1280 or higher on SAT
  9. Complete a field experience and document the experience in a portfolio specific to the student's area of focus
  10. Develop a comprehensive portfolio of work based on the student's field experience or topic that is related to the student's area of focus

### **Fine Arts Honors Diploma**

The Ohio State Board of Education has established a Diploma with Honors. Students must meet the following criteria:

- The student who completes the high school academic curriculum shall all but one of the following criteria:
  1. Earn four units in Math
  2. Earn three units in Science including one unit of advanced science
  3. Earn three units in Social Studies
  4. Earn three units of one world language or no less than two units of each of two world languages studied.
  5. Earn four units in Fine Arts
  6. Earn two additional elective units with a Fine Arts focus
  7. Earn 3.5 on a 4.0 scale
  8. Earn 27 or higher on ACT or 1280 or higher on SAT
  9. Complete a field experience and document the experience in a portfolio specific to the student's area of focus
  10. Develop a comprehensive portfolio of work based on the student's field experience or topic that is related to the student's area of focus.

**Social Science and Civic Engagement Honors Diploma**

The Ohio State Board of Education has established a Diploma with Honors. Students must meet the following criteria:

- The student who completes the high school academic curriculum shall meet at least seven of the following criteria:
  1. Earn four units in Math
  2. Earn three units in Science including one unit of advanced science
  3. Earn five units in Social Studies
  4. Earn three units of one world language or no less than two units of each of two world languages studied.
  5. Earn one unit in Fine Art
  6. Earn three additional elective units with a social science and/or civics focus
  7. Earn 3.5 on a 4.0 scale
  8. Earn 27 or higher on ACT or 1280 or higher on SAT
  9. Complete a field experience and document the experience in a portfolio specific to the student’s area of focus
  10. Develop a comprehensive portfolio of work based on the student’s field experience or topic that is related to the student’s area of focus

**Latin Honor Laude System**

Beginning with the graduating class of 2020, graduating seniors will be recognized for their academic achievements as follows;

Summa Cum Laude “With Highest Praise” .....	GPA 4.0 and above
Magna Cum Laude “With Great Praise” .....	GPA 3.7 – 3.99
Cum Laude “With Praise” .....	GPA 3.5 – 3.69

**Honors Designations**

Beginning with the graduating class of 2020, graduating seniors will be recognized for their engagement in academically challenging coursework; Students will earn one point toward their Honors Designation Level for each Honors, Advanced Placement and College Credit Plus course in which they earn a “B” or above.

Highest Honors.....	16 + points
High Honors.....	12-15 points
Honors.....	8-11 points

\*This does not replace the Honors Diploma as established by the Ohio Department of Education.

**Valedictorian and Salutatorian**

Valedictorian .....	Highest GPA in the graduating class
Salutatorian.....	Second Highest GPA in the graduating class

### **Eligibility for Participation in Activities**

All students in Grades 6 through 12 who wish to participate in school activities must meet a minimum required grade point average of 2.0. “Activities” have two traits:

- They are not required as part of a student’s academic program, and
- A paid advisor is employed. Student’s eligibility for participation shall be based on his/her grade point average by the immediately preceding grading period.

### **OHSAA Guidelines for Grades 7 – 12**

- To be eligible, a passing grade in five (5) one-credit subjects or five credits collectively each grading period is mandatory.
- For all students, eligibility for the first grading period of a school year is determined by the fourth grading period grades from the previous school year.
- No summer school grades or credits can change eligibility.

### **District Guidelines for Grading Period**

- Students with an average of 2.0 or higher at the beginning of each grading period, and who meet all other requirements of the (OHSAA) standards, shall be fully eligible for participation.
- No probationary period is permitted for a student who does not meet the standards of the OHSAA which states that a student must pass the equivalent of 5 credits the preceding 9 weeks to be eligible the following 9 weeks.
  - An ineligible student under this rule shall remain ineligible until the fifth school day after the end of the next grading period.

### **Career and Technical Education Programs**

- These programs may not be dropped.
- These state-funded programs are staffed on the basis of student enrollment; enrollment must remain firm to maintain eligibility for state funds.
- If a student has been accepted into a career and technical education program and has made a commitment, the student must remain in the program for at least one school year.

### **National Testing Programs**

Participation in the following tests is highly recommended for students considering post high school education:

#### **PSAT/NMSQT-**

- Administered to all students in Grades 10 and 11 **at no cost to the students**
- Preliminary Scholastic Aptitude Test / National Merit Scholarship Qualifying Test (ONLY 11<sup>th</sup> grade scores considered for this) - October 2019

#### **ACT (American College Test)**

- Administered to all students in 11<sup>th</sup> grade **at no cost to the students.**

#### **SAT (Scholastic Aptitude Test)**

- Juniors should take this test in the spring.

Both the ACT and the SAT may be taken more than once. Seniors who have not taken the tests in their junior year should take the tests in the fall of the senior year.

- Registration may be done online.
- Important to note registration deadline in order to avoid paying a late fee.
- Fee waivers may be available to students based upon financial need.

**SAT Waiver information:**

<https://collegereadiness.collegeboard.org/sat/register/fees/fee-waivers>

**ACT waiver information:**

<https://www.act.org/content/act/en/search.html?searchkey=fee%20waiver.>

<u>ACT Test Dates</u>	<u>SAT Test Dates</u>
September 7, 2019	October 5, 2019
October 26, 2019	November 2, 2019
December 7, 2019	December 7, 2019
February 8, 2020	March 14, 2020
April 18, 2020	May 2, 2020
June 13, 2020	June 6, 2020
July 18, 2020	August 29, 2020

GPA Weighting Scales

**AP and Select CCP Scale:**

- A = 5 points
- B = 4 points
- C = 3 points
- D = 2 points
- F = 0 points

**Honors Scale:**

- A = 4.5 points
- B = 3.5 points
- C = 2.5 points
- D = 1.5 points
- F = 0 points

**General Scale:**

- A = 4 points
- B = 3 points
- C = 2 points
- D = 1 point
- F = 0 points

**Advanced Placement**

- Advanced Placement courses offer students the opportunity to complete college-level studies at the high school level.
- All students enrolled in an AP course will be required to take the nationally administered AP exam in May.
- Students will be assessed a fee (\$94/\$37.20 reduced rate) to cover the cost of their first AP course exam per school year.
  - The fee is established by the College Board and is subject to change. It will be assessed as part of the annual student fee statement.
  - The student is only responsible for one AP exam fee. If a student takes five (5) AP exams in one school year, he/she will only have to pay for one (1) exam.
- A student who is successful on the AP examination(s) may enter college with some college credits already completed.

- Most colleges and universities in Ohio accept a score of “3” or above in order to receive college credit. Check specific college/university for requirements.
- An AP Grade Report available on the College Board website in early July.  
<https://apstudent.collegeboard.org/home?navid=gh-aps>

### **Credit Flexibility**

Credit Flexibility is designed to broaden the scope of curricular options available to students, increase the depth of study available for a particular subject, and tailor the learning time or conditions needed to complete a high school diploma. Student may earn credits through:

- Completing coursework in the traditional setting
- Testing out or showing mastery of course content
- Pursuing educational options such as online coursework, independent study, internships, service learning, research-based projects, CCP college – high school programs, distance learning, educational travel

Applications for Credit Flexibility options are available within each Guidance Office and via the district website. For more information, please contact the current (or receiving) guidance counselor.

### **College Credit Plus (CCP)**

- CCP was established as a way for high school students to earn credits through institutions of higher education.
- Qualified high school students may experience coursework at a college or university level while still in high school.
- A student admitted to a course by an institution of higher education will be expected and required to perform at the same level as the institution’s regular students.
- Lakeland Community College is a primary partner of the Willoughby Eastlake City School District however, students may choose to attend other institutions of higher education for CCP coursework.

### **College Credit Plus Requirements**

- Student must be enrolled in both college and high school
- Student to earn transcribed college and high school credit upon successful completion of course
- Attend CCP information/registration sessions provided by the college/university
- Must meet college/university requirements for entrance
- Must complete the CCP “Intent to Participate” form prior to April 1, 2019
- Must apply to the college or university of choice by the appropriate deadline
- Receive an eligibility score on the ACT, SAT, or Accuplacer per the chart below:

Readiness Area	ACT	SAT	Compass
English	18	430 Writing OR 450 Critical Reading	1110
Mathematics	21	500	***

\*\*\*To participate in math courses through CCP through Lakeland, students must complete Algebra 2 and place into college level math. Lakeland's placement exam and/or ACT/SAT scores may be used. (Lakeland Community College requirements – requirements may vary based on college/university)

### **College Credit Plus Benefits**

- Students can take courses not offered in the high school and/or take more advanced courses
- Provides opportunities for students to study “in-depth” areas of special interest or need
- Allows students to receive both high school and college credit while still in high school
- Reduces college costs while earning high school and college credit
- Students experience college-level work/life prior to making final decisions for the future

### **College Credit Plus Risks**

- Possible effect on GPA and class standing if the course is not completed successfully
- Increases time for travel (student's responsibility) to and from school, study, etc.
- CCP students may be enrolled in courses with adult students
- Grade reporting periods for colleges are often quite different from those for high schools.
- Financial obligations become the parent/student's responsibility if the student is withdrawn from the class after the identified grace period or if the student fails the class. Reimbursement is not required if the student is identified as being economically disadvantaged in accordance with Ohio Administrative Code 3333-1-65.6(B)(2).
- Vacation days at the home school and the CCP school may not coincide. CCP classes may be in session while the home school is on vacation.
- Students are responsible for acceptance of CCP credit by their college/university of choice for post high school attendance.

### **College Credit Plus Probation**

A student will be placed on probation if a student earns lower than a 2.0 cumulative GPA in college courses or withdrawals from two or more courses in the same term. When a student is on CCP probation the student may enroll in no more than one college course for the next term and may not enroll in a course in the same subject area in which the student previously earned a D or an F. The student remains on probation until the student has improved their cumulative college CPA to 2.0 or higher.



### **College Credit Plus Dismissal**

A student will be dismissed from the CCP program when the student has met the definition of CCP probation for two consecutive college terms. Once a student is dismissed from the CCP program, the student may not enroll in college courses for the following college term. After one term on dismissal, the student may request an appeal of the CCP Dismissal status.

### **College Credit Plus Dismissal Appeal Process**

Following one term of dismissal, a student may submit a request in writing to be reinstated to the College Credit Plus Program. (*Summer shall only be counted as a term if the student is enrolled in one or more high school courses during the summer*). Upon receipt of the reinstatement request, the student's full high school and college academic record will be reviewed to determine whether the student has achieved academic progress and whether s/he will be reinstated on probation or without restriction.

**Reinstatement on Probation:** In order to be reinstated to the College Credit Plus Program on probation, the student must meet the following academic progress criteria:

1. Maintain a 3.0 grade point average or higher for one academic high school semester.
2. Meet with their school counselor to develop an individual pathway plan that includes high school graduation requirements and possible college courses.
3. Daily attendance rate of 85% or higher during said high school semester.

**Reinstatement without Restriction:** In order to be reinstated without any restrictions, the student must meet the following academic progress criteria:

1. Complete appeals process and abide by the superintendent's decision (see below for appeals process).

### **Appeals Process**

Any student who is dismissed from the College Credit Plus Program or prohibited from taking a course in which the student earned a grade of "D" or "F" or for which the student received no credit, may appeal the decision to the Superintendent. The appeal must be filed in writing within five (5) business days after the student is notified of the dismissal or prohibition against taking a course. Upon receiving the written appeal, the Superintendent will notify each Institution of Higher Education in which the student is enrolled that the student has filed an appeal.

## **College Credit Plus Grading**

- Any disputes between students and local boards of education regarding high school credits granted for college work may be appealed to the State Board of Education whose decision is final.
- Student records must reflect evidence of successful completion of each course for high school credit to be awarded.
- The student's permanent record shall indicate the college and the courses taken for high school credit and the number of credits to be awarded.
- The grade shall be included in the calculation of the student's total grade point average as though the course were being taken in high school.
- A course taken for "pass/fail" shall indicate whether the student passed or failed, but shall not be considered in calculating the student's grade point average.
- Select CCP courses offered on the high school campus and/or college/university campus are weighted the same as advanced placement courses which are on a five (5) point scale per Ohio Statute.

### **College Credit Plus (CCP) Sample Pathways Operating in conjunction with Lakeland Community College**

#### **Pathway 1**

**19 semester hours total (this pathway may be available at home high school)  
Algebra 2 must be completed at the high school prior to taking MATH**

#### **FALL**

ENGL 1110 Composition 1 (3 semester hours)

POLS 1300 US National Government (3 semester hours)

MATH 1650 College Algebra (4 semester hours)

#### **SPRING**

ENGL 1120 Composition 2 (3 semester hours)

POLS 2100 State and Local Government (3 semester hours) MATH 1700 Trigonometry (3 semester hours)

## **Pathway 2**

**30 semester hours total (this pathway may be available at home high school)  
Algebra 2 must be completed at the high school prior to taking MATH**

### **FALL (Junior Year)**

ENGL 1110 Composition 1 (3 semester hours)  
POLS 1300 US National Government (3 semester hours)  
MATH 1650 College Algebra (4 semester hours)

### **SPRING (Junior Year)**

ENGL 1120 Composition 2 (3 semester hours – **Prerequisite: ENGL 1110 or placement test**)  
POLS 2100 State and Local Government (3 semester hours)  
MATH 1700 Trigonometry (3 semester hours – **Prerequisite: MATH 1650 or placement test**)

### **FALL (Senior Year)**

POLS 2200 Intro to International Relations (2 semester hours)  
\*\*MATH 2350 Applied Calculus 1 (3 semester hours – **Prerequisite: MATH 1650 or permission**)

### **SPRING (Senior Year)**

\*\*POLS 2300 Intro to Comparative Politics (3 semester hours)  
\*\*MATH 2450 Applied Calculus 2 (3 semester hours – **Prerequisite: MATH 2350**)

**\*\*These courses are only offered on Lakeland Community College campus.**

## Pathway 3

**30 semester hours total**

**Designed for the senior who has completed high school required courses**

### General Courses

PSYC 1500 Intro to Psychology (3 semester hours)

SOCY 1150 Principles of Sociology (3 semester hours)

HUMX 1100 Intro to Humanities (3 semester hours)

COMM 1000 Effective Public Speaking (3 semester hours)

ECON 1150 Basic Economics (3 semester hours)

+

### Math Sequence (select one)

MATH 1650 College Algebra /1700 Trigonometry (7 semester hours total) MATH

1550 Statistics /1650 College Algebra (8 semester hours total)

+

### Science Sequence (select one)

**\*Non-Science Majors (7 – 8 semester hours total)**

GEOL 1100 Intro to Physical Geology or GEOL 1200 Intro to Historical Geology (4 semester hours each)

PHYS 1500 Astronomy (4 semester hours)

BIOL 1140 Human Biology (3 semester hours)

BIOL 1010 Intro to Bio 1 or BIO 1020 Intro to Bio 2 or BIO 1030 Environmental Issues (3 semester hours each)

CHEM 1100 Elementary Chemistry (4 semester hours)

**\*Science Majors (8 – 10 semester hours total)**

BIOL 1510 Principles of Bio 1 & 1520 Principles of Bio 2 (8 semester hours total)

CHEM 1500 General Chemistry\* & 1600 General Chemistry 2 (10 semester hours total)

PHYS 1610 General Physics 1\*\* & 1620 General Physics 2 (10 semester hours total)

**\*Prerequisites: HS Chemistry, Math 1650 (can be taken concurrently) or placement test into Math 1700**

**\*\*Prerequisite: Math 1650 or permission**

**Seniors are encouraged to consult the Lakeland Advisor if they are interested in completing the first year of their Associate's Degree.**

### Willoughby-Eastlake CCP Offerings w/ Lakeland Community College

Students must meet CCP eligibility requirements (see page 12). Courses are offered within each high school and are taught by W-E teachers who maintain adjunct professor status. Students earn **BOTH** high school **AND** college credit (see pages 12-15 for more information about CCP).

CCP Offerings – Fall 2018 (1 <sup>st</sup> semester)	CCP Offerings – Spring 2019 (2 <sup>nd</sup> semester)
ACCT 1100 Intro to Financial Accounting	ACCT 1200 Intro to Managerial Accounting
ENGL 1110 English Composition I (A)	ENGL 1120 English Composition II
MATH 1650 College Algebra	MATH 1700 Trigonometry
POLS 1300 US National Government	POLS 2100 State and Local Government
POLS 2200 Introduction to International Relations	POLS 2300 Introduction to Comparative Politics
HIST 1250 Western Civilization I: Antiquity - Reformation	HIST 1450 Western Civilization II : Age if Revolution - Present
HIST 1450 World Civilization I: The Ancient and Medieval World	HIST 1550 World Civilization II: The Modern World
HIST 2150 US History: Colonization - Reconstruction	HIST 2250 US History: Reconstruction - Present
PHYS 1610 General Physics I	PHYS 1620 General Physics II

#### **ACCT 1100 Intro to Financial Accounting - 4 Semester Hours (1<sup>st</sup> semester)**

This course examines financial accounting and reporting with emphasis on analysis and interpretation from a user perspective. The course covers the accounting principles underlying the accounting cycle, income measurement using accrual accounting, asset valuation, ratio analysis, and cash flow. Students will study the major components of the financial statements included in the corporation annual report.

#### **ACCT 1200 – Intro to Managerial Accounting - 3 Semester Hours (2<sup>nd</sup> semester)**

This course examines managerial accounting tools and techniques used by decision makers to help make an organization's operations more effective and efficient. Students will apply basic managerial accounting concepts to problems of management planning, control, decision making, and performance evaluation. Topics covered include job order cost and analysis, process cost and analysis, activity-based cost and analysis, variable cost, cost behavior and cost volume-profit analysis, budgeting, standards cost, relevant cost, and capital budgeting. **Prerequisite: ACCT 1100**

#### **ENGL 1110 English Composition I - 3 Semester Hours (1<sup>st</sup> semester)**

This course focuses on the writing process and on the composition of expository writing assignments, including personal, informational, and critical essays. Students will read and analyze expository and imaginative texts (fiction, nonfiction, poetry, or drama). Because of duplication in course content, students who have taken ENGL 1111 English Composition I (B) should not take this course.

**Prerequisite: Placement Test**

**ENGL 1120 English Composition II - 3 Semester Hours (2<sup>nd</sup> semester)**

This course analyzes argumentative strategies, models, and texts. Students will focus on the research process: identifying sources through electronic and print-based research strategies, evaluating research materials, and integrating and synthesizing research material. The course culminates in the production of a fully documented argumentative paper. **Prerequisite: ENGL 1110 or ENGL 1111**

**HIST 1450 World Civilizations I - 3 Semester Hours (1<sup>st</sup> Semester)**

This course is a survey of world history from its earliest origins in the Near East through 1500. It is designed to provide students with an understanding of the Western and non-Western political, religious, economic, intellectual, and cultural evolution of world history.

**HIST 1550 World Civilizations II - 3 Semester Hours (2<sup>nd</sup> Semester)**

The course explores the development of the world from 1500 to the present. It is designed to provide students with an understanding of the key facets of non-Western and Western social, political, economic, cultural, religious, and intellectual history. (3 contact hours)

**HIST 2150 U.S. History I - 3 Semester Hours (1<sup>st</sup> Semester)**

This in-depth course examines the factors, from the sixteenth through the third quarter of the nineteenth century, which resulted in the creation of the unique American civilization. The course emphasizes the interaction between the American demographical and geographical environment, and the cultural influence of European colonists along with African contributions. It also focuses on the political, economic, cultural, and social developments that brought about the Civil War and attempts at Reconstruction.

**HIST 2250 U.S. History II – 3 Semester Hours (2<sup>nd</sup> Semester)**

This course traces the development of the United States from the conclusion of Reconstruction (1877) to the present. It examines those components that transformed the United States into a world power and the changes in the role and position of the government in the lives of its people and institutions.

**MATH 1650 College Algebra - 4 Semester Hours (1<sup>st</sup> semester)**

This course uses an integrated laboratory and lecture approach to investigate and solve relations and functions numerically, analytically, and graphically. Topics include solutions of polynomial, rational, exponential, and logarithmic equations and inequalities; systems of linear and non-linear equations; matrix solutions, determinants, conic sections, sequences and series, and mathematical modeling. Students must supply a graphing calculator. **Prerequisite: MATH 0950 or Placement Test**

**MATH 1700 Trigonometry 3 - Semester Hours (2<sup>nd</sup> semester)**

This course includes the study of trigonometric functions and inverse trigonometric functions and their graphs; solutions of right and oblique triangles and their applications; solutions of trigonometric equations and inequalities; the use of identities, vectors, and complex numbers; and solutions of polar equations and parametric equations. Students must supply a graphing calculator. **Prerequisite: MATH 1650 or Placement Test**

### **POLS 1300 US National Government - 3 Semester Hours (1<sup>st</sup> semester)**

This course provides an examination of the formation, structure, processes and fundamental political principles of the United States political system, including the development of the Constitution and the federal system, civil rights and liberties, public opinion and political participation, political parties and interest groups, the role of money and the media in the political system, political campaigns and elections, Congress and the legislative process, the presidency, and the federal judiciary. It focuses not only on the achievements of the political system but on its shortcomings as well, thus leading to consideration of the political challenges facing the system and suggestions for reform.

### **POLS 2100 State and Local Government - 3 Semester Hours (2<sup>nd</sup> semester)**

This course provides a survey of the organization, processes, powers, and responsibilities of state and local government in the United States, with special reference to Ohio. Topics include national-state and statelocal relations, state constitutions and municipal charters, political participation, parties and special interests, and the basic institutions of government comprising the legislative, executive, and judicial branches. The course also considers various types of local governments and the problems of metropolitan government. Policy issues examined include education, welfare, and law enforcement policy, as well as budgeting and finance at the state and local levels. Students must conduct a field assignment in their communities.

### **POLS 2200 Introduction to International Relations - 2 Semester Hours (1<sup>st</sup> semester)**

This course examines the origin, nature, and development of the post-Cold War international system. Basic concepts include state, nation, power, sovereignty, nationalism, national interest, security, and balance of power. The course examines the major governmental and nongovernmental state and international factors influencing international relations, as well as the primary issues of the modern international system. It also considers strategies for enhancing international security and peace, diplomacy, international trade, nuclear and conventional military power, and international law and government.

### **PHYS 1610 General Physics I - 5 Semester Hours 1<sup>st</sup> Semester**

Prerequisite: MATH 1650 or permission of instructor This is the first course in a two-course introductory physics sequence designed for students not majoring in engineering, physics, or chemistry. Topics, which are algebra/trigonometry-based, include vectors, kinematics, Newton's laws, energy, linear and angular momentum, rotational dynamics, fluids and thermodynamics. Students will complete experiments related to these topics in lab. (7 contact hours: 4 lecture, 3 lab)

### **PHYS 1620 General Physics II - 5 Semester Hours 2<sup>nd</sup> Semester**

Prerequisite: PHYS 1610 or permission of instructor This course is a continuation of PHYS 1610 General Physics I. Topics, which are algebra/trigonometry based, include electrostatics, capacitance, DC series and parallel circuits, electromagnetism, simple AC circuits, mechanical waves, geometric and physical optics, and modern physics. Students will complete experiments related to these topics in lab. (7 contact hours: 4 lecture, 3 lab)

## COURSE OFFERINGS

### ACADEMIC DECATHLON

<b>Grades 9 - 12</b>	
	1110 Academic Decathlon (1 credit)

#### **1110 Academic Decathlon**

This course is a national competition that requires students to master seven academic subjects (math, literature, music, art, economics, science, and history), as well as to deliver prepared and impromptu speeches, to undergo an interview, and to write an essay connected to their studies. Academic Decathlon’s curriculum changes each year and is centered on a theme. All of the academic areas, except math, are related to the thematic focus. The curriculum forces students to study several subjects in depth and in detail, and will expand reading, writing, math, and public speaking skills. Although the team consists of three “A” students, three “B” students, and three “C” students as determined by GPA, the class is open to all interested students in the building. Course meets for 1 period, all year.

### BUSINESS COURSES

<b>Grade 9</b>	
	5303 Personal Finance (½ credit) 5500 Introduction to Business (½ credit)
<b>Grade 10</b>	
	5303 Personal Finance (½ credit) 5500 Introduction to Business (½ credit) 5502 Accounting (1 credit) 5503 Entrepreneurship (½ credit) 5507 Business Lab/School Store (1 credit)
<b>Grades 11-12</b>	
	5303 Personal Finance (½ credit) 5500 Introduction to Business (½ credit) 5502 Accounting (1 credit) 5503 Entrepreneurship (½ credit) 5507 Business Lab/School Store (1 credit)



### **5303 Personal Finance**

This course focuses on all aspects of money management. Students will learn about banking, checking, savings, credit cards, consumerism, investing, budgeting, insurance, how to complete their own taxes, and planning for long-term financial management. Students will explore possible careers and how choices made in their everyday lives contribute to their financial situations. It will provide hands-on instruction and involve guest speakers from the community. This course addresses financial literacy standards.

### **5500 Introduction to Business**

Students will be exposed to many areas of business which will enable them to demonstrate knowledge of business terms and concepts, economic principles, entrepreneurial skills, business communications, accounting, management of human resources, basic marketing concepts, business law, international business, financial literacy, and current events related to business. It will allow students to browse and select other business courses that may interest them after having previewed all aspects of business through Introduction to Business.

### **5502 Accounting**

This course highlights the fundamental principles and concepts that apply to everyday modern business and finance. It emphasizes the complete accounting cycle for a sole proprietorship and corporate accounting. Students will learn to analyze, journalize and post business transactions and to prepare and analyze financial statements. This course also includes computer-based simulation projects at the end of each semester. It is an excellent preparation for entry-level jobs and is highly recommended for students planning to study or major in business at a college or university.

### **5503 Entrepreneurship**

This course actively involves the student in how to start a business, select and market a product/service, acquire financing, hire a staff, and write a successful business plan. Students will have the opportunity to form a class business and market and sell a product to the school. It will provide hands-on instruction and involve guest speakers from the community.

### **5507 Business Lab/School Store**

Student will learn how to successfully operate and work in the school store. Students will study retail store operations and business functions including customer service, management, accounting, marketing, purchasing, inventory control, and selling. Students will also learn skills and work in the school store outside of the regular class sessions.

## COMPUTER COURSES

Grade 9	
	3900 Computer Science I (½ credit) 3901 Computer Science II (½ credit) 3902 Programming (½ credit) 3904 HTML Web/JavaScript (½ credit) 3907 Computer Aided Design 2D -3D (½ credit)
Grade 10	
	3900 Computer Science I (½ credit) 3901 Computer Science II (½ credit) 3902 Programming (½ credit) 3903 Multimedia Communications (½ credit) 3904 HTML Web/JavaScript (½ credit) 3907 Computer Aided Design 2D -3D (½ credit) 3908 Media Productions (1 credit) 3999 Student Experience (1 credit) 2601 Robotics (½ credit) 2605 STEM Drone (½ credit) 2607 Digital Fabrication I (½ credit) 2608 Digital Fabrication II (½ credit) 2608 Digital Fabrication III (½ credit)
Grades 11-12	
	3900 Computer Science I (½ credit) 3901 Computer Science II (½ credit) 3902 Programming (½ credit) 3903 Multimedia Communications (½ credit) 3904 HTML Web/JavaScript (½ credit) 3905 AP Computer Science Principles (CS50) (1 credit) 3907 Computer Aided Design 2D -3D (½ credit) 3908 Media Productions (1 credit) 3999 Student Experience (1 credit) 2601 Robotics (½ credit) 2605 STEM Drone (½ credit) 2607 Digital Fabrication I (½ credit) 2608 Digital Fabrication II (½ credit) 2608 Digital Fabrication III (½ credit)

### **3900 Computer Science I**

An introduction to the use of computers, basic programming, and several software applications.

### **3901 Computer Science II**

Students will expand computer application skills in word processing, database, spreadsheets, presentations, and internet use.

### **3902 Programming**

The student will learn program design and logic skills. Current programming languages will be used.

### **3903 Multimedia**

The student will explore the concepts of combining two or more forms of media into one project. Examples of applications include animation, presentation software, video software and sound-editing software.

### **3904 HTML and JavaScript**

The student will explore the fundamental concepts and structure of web page and site design using HTML codes and tags. JavaScript will be used to enhance pages.

### **3905 AP Computer Science Principles (CS50)**

AP Computer Science is an adaptation of the Harvard University's introduction to the intellectual enterprises of computer science and the art of programming for students with a diversity of technological background and experience. CS50 for AP Computer Science Principles is specifically tailored to align with the AP Computer Science Principles curriculum framework. **Fee Required.** *Students enrolled in this course are required to take the A.P. Exam in May.*

### **3907 Computer Aided Design 2D – 3D**

CAD is a course in which students will express themselves visually and will be able to showcase their creativity. The CAD course will be directed toward the development of industry standard skills.

### **3908 Media Productions**

This course allows students to express their creative ideas through the powers of technology. Students will learn the basics of media production using the media tools of photography, film, video, audio productions, and interactive media. Students will apply these fundamentals by participating in hands-on group projects.

### **3999 Student Experience through Media**

This course provides students an opportunity to video blog about their school experience. Students will utilize social media and videos as primary communication tools to express their creative ideas through the powers of technology. Students will work with students and staff across the district in a professional capacity as they serve as a quasi-marketing team for the district in order to engage students and the community with what is happening in the district.

### **2601 Robotics**

This course introduces students to key concepts and theories of robotic application. Robotics integrates science, technology, engineering and math principles with real applications as students design, build and program a robot to compete in a robotics competition. Students work with industry professionals, collaborate with classmates, conduct research, engage in the design process, experience the tooling and fabrication process, adhere to timelines and budgets, document the design process, communicate their design and discuss their work with industry professionals.

### **2605 STEM Drone**

This course uses the Drone Smartz program and teaches students about drone flying, the legal and safety issues, and the regulations according to the Federal Aviation Agency and the Federal Communications Commission. The three areas of aviation, operations, equipment and personnel, will be taught. The hands-on experiences enable students to learn via a simulator and actual flight time. Students are required to complete research, and flight logs and maintain a personal portfolio to demonstrate training and competence as evidence of completion of this program. Students have the potential to earn their operator's certification.

### **2607 Digital Fabrication I**

This course introduces students to the fundamentals of digital design and fabrication. Instruction will include techniques which will allow students at any skill level to create and fabricate designs. This course will offer instruction in CAD (Corel Draw) and an introduction to the FAB Lab equipment. Students will focus on design and creation using the vinyl cutters and laser cutters.

### **2608 Digital Fabrication II**

This course will expand on the design principles outlined in the introduction course. Students will build on their knowledge in CAD, design and digital fabrication to complete assignments using multiple processes. Students will continue to develop skills using the vinyl and laser cutters, and be introduction to other equipment such as 3-D printers and CNC machines.

**Prerequisite: Digital Fabrication I**

### **2609 Digital Fabrication III**

This course will provide students with a Capstone experience designed to integrate all of the design concepts presented in the previous courses. It is a project based course, in which students will design and create one or more original projects using multiple processes.

**Prerequisite: Digital Fabrication II**

## ENGLISH COURSES

	<b>College Prep *All 1 Credit</b>	<b>Honors/AP *All 1 Credit</b>	<b>Electives *All ½ Credit unless otherwise stated</b>
<b>Grade 9</b>			
	301 English I	0310 English I Honors	0504 Creative Writing 0510 Publications 0512 Yearbook (1 cr) 0511 Drama/Theater
<b>Grade 10</b>			
	401 English II	0421 English II Honors	0500 Speech/ Oral Interpretation 0502 Speech II 0504 Creative Writing 0510 Publications (1 Credit) 0511 Drama/Theater 0512 Yearbook (1 Credit)
<b>Grade 11</b>			
	0522 English III	0531 English III Honors 0532 AP English Language and Composition	0500 Speech/ Oral Interpretation 0502 Speech II 0503 Literature as Film 0504 Creative Writing 0505 Contemporary Literature 0510 Publications (1 Credit) 0511 Drama/Theater 0512 Yearbook (1 Credit) 0613 & 0614 Writing for College I & II 0800 ACT/SAT Prep

Grade 12			
	0622 English IV	0631 English IV Honors  0621 AP English Literature and Composition	0500 Speech/Oral Interpretation 0502 Speech II 0503 Literature as Film 0504 Creative Writing 0505 Contemporary Literature 0510 Publications (1 Credit) 0511 Drama/Theater 0512 Yearbook (1 Credit) 0613 & 0614 Writing for College I & II

**0301 English I**

Students will learn and practice techniques for close reading, writing, textual citation, speaking, and analysis of text using a variety of selections, both literary and informational, classic and contemporary, representing diverse cultures and viewpoints. An appreciation for the readings is developed through the study of the fundamentals of composition. Students will write routinely using standard English conventions to produce clear, coherent essays. They will also focus on developing and refining their oral communication, listening, grammar, vocabulary, digital media, research, and thinking skills. Learning targets for English 9-10 as established by Ohio’s Learning Standards will drive the instruction of this course. While there are no fees for this course, students will be required to obtain copies of the major literary works that will be studied during the school year. The students are required to take an end of course exam for English I.

**0310 English I Honors**

In this weighted course, students will learn and practice techniques for close reading, writing, textual citation, speaking, and analysis of text using a variety of selections, both literary and informational, classic and contemporary, representing diverse cultures and viewpoints, as do all English I courses. An appreciation for the readings is developed through the study of the fundamentals of composition. Students will write routinely using standard English conventions to produce clear, coherent essays. They will also focus on developing and refining their oral communication, listening, grammar, vocabulary, digital media, research, and thinking skills. Learning targets for English 9-10 as established by Ohio’s Learning Standards will drive the instruction of this course. The honors course, however is both accelerated and enriched with regards to content, thus covering more material with more depth. In addition, students are expected to demonstrate their writing with a greater degree of sophistication in content and style. Students are expected to work independently and to be motivated intrinsically. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year. The students are required to take an end of course exam for English I.

### **0401 English II**

Students will continue to learn and practice techniques for close reading, writing, textual citation, speaking, and analysis of text using a variety of selections, both literary and informational, classic and contemporary, representing diverse cultures and viewpoints. Composition centers on the development of the basic forms of writing, concentrating on developing clearly organized and well-developed multi-paragraph compositions using standard English conventions. They will also continue to focus on developing and refining their oral communication, listening, grammar, vocabulary, digital media, research and thinking skills. Learning targets for English 9-10 as established by Ohio's Learning Standards will drive the instruction for this course. While there are no fees for this course, students will be required to obtain copies of the major literary works that will be studied during the school year. The students are required to take an end of course exam for English II.

### **0421 English II Honors**

In this weighted course students will continue to learn and practice techniques for close reading, writing, textual citation, speaking, and analysis of text using a variety of selections, both literary and informational, classic and contemporary, representing diverse cultures and viewpoints. Composition centers on the development of the basic forms of writing, concentrating on developing clearly organized and well-developed multi-paragraph compositions using standard English conventions. They will also continue to focus on developing and refining their oral communication, listening, grammar, vocabulary, digital media, research and thinking skills. Learning targets for English 9-10 as established by Ohio's Learning Standards will drive the instruction for this course. The honors course, however, proceeds at an accelerated pace and is enriched with regards to content, thus covering more material with more depth. Greater independence is expected of the students in their evaluation of literature. In addition, students are expected to demonstrate a greater degree of sophistication in content and style in their writing. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year. The students are required to take an end of course exam for English II.

### **0500 Speech/Oral Interpretation**

Communications is a course that introduces students to various facets of communication skills. This course will include public speaking and media literacy intended for publication. Public address and research skills will be used along with technology and software-based applications for presentation purposes. Students in this course will be expected to use the writing process to produce speech outlines and drafts and to develop technical writing. Students gain confidence and poise through class presentations. Computer-based research skills are honed and the writing process is included.

### **0504 Creative Writing**

This course offers students a series of activities and experiences designed to develop the awareness and skills essential in writing creatively. Students will experiment with various forms and will write daily in class. Class activities will include reading professional writing, writing from a variety of prompts, orally presenting personal compositions to the class, and peer editing the compositions of others. Success in this class will depend on the ability to synthesize techniques studied in class with original thinking, while employing the necessary grammar, usage, and punctuation to make a composition clear and precise. Each student will compile a portfolio of their work.

### **0505 Contemporary Literature**

This course offers a global approach to literature. Students will explore the literature of the twentieth century to the present. Emphasis will be placed on the research, and critical analysis skills necessary for success in college. Students will also write creatively by developing their own poems, stories and creative essays. Contemporary issues and mature language may be encountered in the reading throughout the course. This course is intended for juniors and seniors who enjoy reading, and would like to study literature published in the twenty-first century.

### **0510 Publications**

This course is the study of journalism through the study of current events and practical application; students will learn by writing in a variety of news formats while contributing to the school newspaper. Students have the opportunity to learn Microsoft Word and Microsoft Publisher.

### **0511 Drama/Theater**

This course will provide knowledge of the principles of drama and hands-on experience of all aspects of theatrical productions

### **0512 Yearbook**

Yearbook will be a project based class that will focus on the planning, creation, selling, financing, and distribution of the school yearbook. The finished project will be completely student generated. In this course, students will gain skills in one or more of the following areas: page design, advanced publishing techniques, copywriting, editing and photography while producing a creative, innovative yearbook which records school memories and events. Participants will gain useful, real world skills in time management, marketing, teamwork, and design principles. Work outside of normal classroom hours will be necessary for this class.

### **0522 English III**

Students will study of a wide range of literary and informational texts that focus on the foundational works of American Literature from Native American and colonial times to the contemporary period. Students will study prominent authors of each literary period with emphasis on significant contributions and historical context of works. Students will continue to practice techniques of close reading, writing, textual citation, formal and informal speaking and analytical skills. Students will write routinely using standard English conventions to produce clear, coherent essays. They will also focus on developing their listening, grammar, vocabulary, digital media and thinking skills. Learning targets for English 11-12 as established by Ohio's Learning Standards will drive the instruction for this course. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year.

### **0531 English III Honors**

In this weighted course, students will analyze a broad range of literary and informational texts that focus on the foundational works of American Literature from Native American and colonial times to the contemporary period. Students will study prominent authors of each literary period with emphasis on significant contributions and historical context of works. Students will continue to practice techniques of close reading, writing, textual citation, formal and informal speaking and analytical skills. Students will write routinely using standard English conventions to produce clear, coherent essays. They will also focus on developing their listening, grammar, vocabulary, digital media and thinking skills. Learning targets for



English 11-12 as established by Ohio's Learning Standards will drive the instruction for this course. The honors course, however, is both accelerated and enriched with regards to content, thus covering more material with more depth. In addition, students are expected to demonstrate in their writing a greater degree of sophistication in content and style. Students are expected to work independently and to be motivated intrinsically. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year.

#### **0622 English IV**

Students will analyze a broad range of literary and informational text that focus on significant literary works and styles of British Literature. Students will explore the history of the English language, the lives of writers and historical backgrounds of specific literary periods. This class will help students become more aware of the relationship of the individual to humanity. Students will continue to advance techniques for close reading, writing, textual citation, formal and informal speaking and analytical skills. Students will routinely write using standard English conventions to produce clear, coherent essays. They will also focus on developing their listening, grammar, vocabulary, digital media, and thinking skills. Learning targets for English 11-12 as established by Ohio's Learning Standards will drive the instruction for this course. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year.

#### **0631 English IV Honors**

In this weighted course, students will analyze a broad range of literary and informational text that focus on significant literary works and styles of British Literature. Students will explore the history of the English language, the lives of writers and historical backgrounds of specific literary periods. This class will help students become more aware of the relationship of the individual to humanity. Students will continue to advance techniques for close reading, writing, textual citation, formal and informal speaking and analytical skills. Students will routinely write using standard English conventions to produce clear, coherent essays. They will also focus on developing their listening, grammar, vocabulary, digital media, and thinking skills. Learning targets for English 11-12 as established by Ohio's Learning Standards will drive the instruction for this course. The honors course, however, is both accelerated and enriched with regards to content, thus covering more material with more depth. In addition, students are expected to demonstrate in their writing a greater degree of sophistication in content and style. Moreover, students are expected to work independently and to be motivated intrinsically. There are no fees for this course, however, students will be required to obtain copies of the major literary works that will be studied during the school year.

#### **0532 AP English Language and Composition**

With recommendations from and the approval of the College Board, the Advanced Placement English Language and Composition course work models a college composition class. The curriculum concentrates on argumentation: how to analyze the rhetoric employed by writers and speakers, how to construct successful arguments which synthesize accredited sources, and how to compose successful arguments that draw on personal knowledge and experiences. Promoting an awareness of current events and history, particularly American history, the coursework places a greater emphasis on non-fiction than fiction and analyzes fiction for

arguments made by the author. **Fee Required.** *Students enrolled in this course are required to take the A.P. Exam in May.*

### **0621 AP English Literature and Composition**

With recommendations from and the approval of the College Board, the Advanced Placement English Literature and Composition course is a college-level literature and composition class. The curriculum involves both the study and practice of writing and the study of literature. Composition study will encompass the modes of discourse, rhetorical strategies and argumentation, critical analysis of literature, and exposition. The study of literature will include a mix of world, English, and American literature, **Fee Required.** *Students enrolled in this course are required to take the A.P. Exam in May.*

### **0502 Speech II**

This course will reinforce the various facets of communication skills from Speech I. This course will include public speaking, media literacy, and copywriting intended for publication. Public address and research skills will be used along with technology and software based applications for presentation purposes. Students in this course will be expected to use the writing process to produce speech outlines and drafts to develop technical writing. Students gain confidence and poise through class presentations. Computer-based research skills are enhanced and the writing process is included. There are no fees for this course. **Prerequisite: Speech I**

### **0503 Literature as Film**

This course explores the relationship between literature and film. During the course, students will explore how a film is produced from script to screen, get an introductory look into the process and art of filmmaking, and produce a short film of their own. Class discussion around literature and films is an integral part of this course, therefore attendance, oral communication, and critical thinking skills are required.

### **0613 Writing for College I**

This course offer the college bound student daily opportunities to practice various forms of prose required in college classes. Illustration, narration, description, process, definition, comparison and contrast, classification, cause and effect, and persuasive writing methods are the primary focus. Students will learn to use all of the methods within the framework of the writing process. This course continues the development of good writing techniques and writing across the curriculum. There is a focus on using standard English conventions, which include proper mechanics, usage, grammar, spelling, voice and tone. Brainstorming, drafting personal revisions, editing, peer revision, and publishing are incorporated for each written piece. A review of college applications and the writing of college essays is included in this course.

### **0614 Writing for College II**

This course is a continuation of Writing for College I. It continues to offer the college bound student daily opportunities to study various forms of writing and to improve one's writing abilities. There is continued focus on written expression that leads to conducting research. Research techniques and the process of conducting research will prove to be valuable skills in college. The selection and implementation of scholarly research is required. The use of standard English conventions, which include proper mechanics usage, grammar, spelling, voice, and tone are expected. Topic selection, brainstorming, drafting, personal revisions, editing, peer revision, and publishing are incorporated for the research process. A review of scholarship

opportunities and the writing of scholarship essays will be included in this course. This course is recommended for college bound juniors and seniors. This elective is taken in addition to the required grade level English coursework. **Prerequisite: Writing for College I**

**FAMILY AND CONSUMER SCIENCES COURSES**

Grades 9-12	*All ½ credit
	1300 Career Exploration I 6402 Creative Cook 6502 Food for Fitness 6503 Teen and Adult Roles 6506 Independent Living 6508 Child Development

**1300 Career Exploration I**

This course will encourage you to think about your future. You will take a close look at potential career opportunities that match your personal aptitudes, passions and interests. Whether you have set your sights on college, technical schools, or the military, this course will lead you through the steps to plan your future. Learn about employability skills, interviewing, career options, requesting letters of recommendation, writing admission essays, job shadowing and creating a portfolio. This course addresses financial literacy standards.

**6402 Creative Cook**

Would you like to learn about the ins and outs of a kitchen? Learn the basics of cooking and food preparation techniques to be confident in the kitchen. This course offers hands-on experience in meal planning, preparing, serving and storing foods. **Fee Required**

**6502 Food for Fitness**

Learn the significance of making healthy choices for physical, social and mental health. This course offers hands-on experience in preparing nutritious meals, alternative cooking methods and applying the “My Plate” food guide. **Fee Required**

**6503 Teen and Adult Roles**

This course will address a myriad of problems and concerns that you face as an adolescent. With an emphasis on development of character, leadership, citizenship and personal responsibility, you will be introduced to processes and strategies to deal with troubling stressful situations.

**6506 Independent Living**

This course is a simulation of life in the real world. Through a simulation experience you will learn about the realities of living on your own, obtaining a job and researching careers. You will analyze finances and be able to establish a budget, open a checking

account and select appropriate housing. This course addresses financial literacy standards. **Fee Required**

**6508 Child Development**

Have you ever considered a career as a teacher, psychologist, pediatrician, nurse, child care provider or social worker? Then this class is for you! Learn about physical, social, emotional, and intellectual development of children at various ages and stages. This course provides for field experiences, including creating developmentally appropriate learning tasks and activities, interacting with children in a day care environment, and considering the responsibilities of parenthood. **Fee Required**

**FINE ARTS COURSES - MUSIC**

Grade 9	
	7401 Symphonic Band (1 credit) 7403 Wind Symphony (1 credit) 7411/7413 Exploring Visual Art/ Music (1 credit – 1 semester art; 1 semester music) 7412 Mixed Choir (1 credit) 7512 Concert Choir (1 credit)
Grades 10-12	
	7401 Symphonic Band (1 credit) 7403 Wind Symphony (1 credit) 7411/7413 Exploring Visual Art/ Music (1 credit - 1 semester art; 1 semester music) 7412 Mixed Choir (1 credit) 7512 Concert Choir (1 credit) 7503 Music Theory & Harmony (1 credit)

**7401 Symphonic Band**

Course objectives include musical skill development as an individual and within the ensemble setting while performing moderately advanced to advanced compositions.

**7403 Wind Symphony**

This course is for selected instrumentalists who have demonstrated high musical skill potential or achievement. **Prerequisite: Audition**

**7412 Mixed Choir**

Performs annually at the winter and spring concerts. This choir serves as preparation for those who may wish to audition for Concert Choir.

**7512 Concert Choir**

Open to all high school students by audition only. Course objectives include a more enriching choral experience through the further development of individual skills and exposure to a wider variety of quality choral literature, with performance being the primary goal.

**Prerequisite: Audition**

**7411 / 7413 Exploring Visual Art / Music**

This course offers students an understanding and appreciation of the basic principles of art and music in a variety of sensory media. In addition, students may also take other upper level art/music courses. **Fee Required**

**7503 Music Theory and Harmony**

Topics to be discussed include a brief study of western music history, musical notation, major and minor keys, scales, modes, intervals, triads, elementary arranging, and ear training. Students may repeat this course for a more intense study of music theory, form, and composition.

**FINE ARTS COURSES - ART**

Grade 9	
	7405 Art I (1 credit) 7411/7413 Exploring Visual Art and Music (1 credit – 1 semester art; 1 semester music) 7414 Art Appreciation (1 credit) 7407 Ceramics I (½ credit) 7507 Ceramics II (½ credit)
Grade 10	
	7405 Art I (1 credit) 7406 Art II (1 credit) 7407 Ceramics I (½ credit) 7507 Ceramics II (½ credit) 7408 Graphic Design I (½ credit) 7408B Graphic Design II (½ credit) 7409 AP Art History (1 credit) 7411/7413 Exploring Visual Art and Music (1 credit – 1 semester art; 1 semester music) 7414 Art Appreciation (1 credit)

Grade 11	
	7405 Art I (1 credit) 7406 Art II (1 credit) 7502 Art III (1 credit) 7407 Ceramics I (½ credit) 7507 Ceramics II (½ credit) 7408 Graphic Design I (½ credit) 7408B Graphic Design II (½ credit) 7409 AP Art History (1 credit) 7411/7413 Exploring Visual Art and Music (1 credit – 1 semester art; 1 semester music) 7414 Art Appreciation (1 credit)
Grade 12	
	7405 Art I (1 credit) 7406 Art II (1 credit) 7502 Art III (1 credit) 7602 Art IV (1 credit) 7407 Ceramics I (½ credit) 7507 Ceramics II (½ credit) 7408 Graphic Design I (½ credit) 7408B Graphic Design II (½ credit) 7409 AP Art History (1 credit) 7411/7413 Exploring Visual Art and Music (1 credit - 1 semester art; 1 semester music) 7414 Art Appreciation (1 credit)

**7405 Art I**

This is an introductory course to gain an overview of materials, techniques, vocabulary and art concepts. Students are evaluated based on studio projects, limited homework, written assignments, tests and participation in classroom activities. **Fee Required**

**7406 Art II**

This course is for students who want to further their talents and skills in both two and three-dimensional media. Projects/homework are more demanding and complex than in Art I. **Prerequisite: Art I, Fee Required**

**7408 Graphic Design I**

This is an introductory course to gain an overview of graphic design, including design basics, Adobe Photo Shop, Adobe Illustrator, and QuarkXPress. Students will develop the necessary skills to create computer-based pieces from start to finished product. **Fee Required**

**7408B Graphic Design II**

This course builds on the knowledge and skills students gained in Graphic Design I. Students will have the opportunity to apply their knowledge and skills to create

magazine ads, billboards, web page layouts, packaging and other projects associated with graphic design and advertising. **Prerequisite: Graphic Design I, Fee Required**

### **7409 AP Art History**

This course explores topics such as the nature of art, its uses, its meanings, art making, and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, constructing understanding of individual works and interconnections of art-making processes and products throughout history. **Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **7502 Art III and 7602 IV**

These courses are designed for the more serious student interested in pursuing an art related career and for those who truly enjoy the creative process. Studio projects and homework are more demanding and sophisticated than those in Art II. Portfolio preparation occurs for those who are seeking college acceptance and scholarships.

**Prerequisite: Art II, Fee Required**

### **7407 Ceramics I**

This course is designed to introduce students to the basics of hand-building with clay. Through the creation of various functional and decorative forms, students will also explore a variety of surface treatments and decoration methods. Students are evaluated on studio projects, exercises, written assignments, tests and participation in classroom activities. **Fee Required**

### **7507 Ceramics II**

This course is for students who want to further develop their skill and confidence in working with clay. Students will continue to learn about hand-building while also learning the process of throwing on the potter's wheel and creating a mosaic.

**Prerequisite: Fee Required**

### **7411/7413 Exploring Visual Art/Music**

This course offers students an understanding and appreciation of the basic principles of art and music in a variety of sensory media. In addition, students may also take other upper level art/music courses. **Fee Required**

### **7414 Art Appreciation**

This course provides students with the opportunity to explore the main eras of art history. Students will learn art criticism and aesthetics through the examination of works of art. Students will have the opportunity to engage in using art materials to experience the process of some art making. These experiences will provide students with a greater understanding and appreciation of art and the art making process however, they will not

be graded. Students will study controversial art and discuss philosophical ideas of art and those who create art. Students will also have the opportunity to learn about the business end of the art making world, such as auction houses, galleries, restoration, art history, archeology and museums. **Fee Required**

**7999 Student Experience through Design**

This course provides students an opportunity to express their ideas about their school experience. Students will utilize graphic design and marketing tools as primary vehicles of communication to express their creative ideas. Students will work with students and staff across the district in a professional capacity as they serve as a quasi-marketing team for the district in order to engage students and the community with what is happening in the district.

**GENERAL ELECTIVE COURSES**

	<b>Requirements</b>	<b>Electives</b>
<b>Grade 9</b>		
		1004 Freshmen Mentee (Rebel Grow) (0.5 Credit)
<b>Grade 10</b>		
<b>Grade 11/12</b>		
		0800 ACT/SAT Prep  1000 Senior Mentoring Rebel Grow

**0800 ACT/SAT Prep**

This computer-centered course prepares juniors and seniors for standardized college entrance exams through test-taking strategies and practice.

**1000 Rebel Grow Mentoring**

At the heart of every freshman mentoring program are the student mentors. Seniors/Juniors apply the previous spring to become 1 of approximately 66 classroom mentors whose responsibilities include taking daily attendance, planning daily classroom activities, tutoring students with academic needs, facilitating small group discussions, leading mini lessons, and communicating with the Rebel Grow teacher-coordinators.

**1004 Rebel Grow Freshmen Mentee Program**

This course is a peer mentoring program which provides every incoming freshman an opportunity to gain support from a current Senior. The goal of the program is to ensure our incoming freshmen experience academic success and adjust positively to the high school experience.



## HEALTH AND PHYSICAL EDUCATION COURSES

	Requirements	Electives
<b>Grade 9</b>		
	8301 Physical Education I (¼ credit)	8603 Plyometrics and Conditioning (½ credit)
<b>Grade 10</b>		
	8401 Health (½ credit) 8402 Physical Education II (¼ credit)	8603 Plyometrics and Conditioning (½ credit)
<b>Grade 11/12</b>		
		8602 Social Relations (½ credit) 8603 Plyometrics and Conditioning (½ credit) 8606 Lifeguarding

\* A student who participates in interscholastic athletics, marching band or cheerleading for at least two full seasons may substitute a different ½ unit credit class in any subject for the physical education unit.

### **8301 Physical Education I**

The Physical Education program consists of a comprehensive co-educational curriculum with major emphasis on achieving and maintaining a health-enhancing level of physical fitness, participating regularly in physical activity, demonstrating competency in motor skills and movement patterns needed to perform a variety of physical activities and exhibiting responsible personal and social behavior that respects self and others in physical activity settings.

### **8402 Physical Education II**

The Physical Education program consists of a comprehensive co-educational curriculum with major emphasis on achieving and maintaining a health-enhancing level of physical fitness, participating regularly in physical activity, demonstrating an understanding of movement concepts, principles, strategies and tactics as they apply to the learning and performance of physical activities, and valuing physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

### **8602 Social Relations**

This course will focus on social issues and healthy life style choices and how these affect personal, family and social relationships.

### **8603 Plyometrics and Conditioning**

This course is for students who have satisfied their physical education graduation requirement and want to continue taking physical education as an elective. This course

will offer an intense workout for male and female athletes who are dedicated to becoming faster and stronger to improve athletic performance. This course will offer programs for off-season and in season conditioning. Students will strength train 2-3 days per week and work on movement skills the other days. Performance measures will be taken three times during the semester (pre-test, mid-term, and at the conclusion of the course).

**8606 Lifeguarding**

This course is designed to provide participants the knowledge and skills necessary to be a lifeguard and professional rescuer. Participants will be certified in American Safety and Health Institute's (ASHI) courses: CPR Pro for the Professional Rescuer, Basic First Aid for the Community, and the Emergency Oxygen Administration. The comprehensive course covers safety skills, accident prevention, scanning, guarding techniques, emergency systems, rescuer skills, first aid in aquatic environments, spinal injury management, open water dangers, legal responsibilities, pool maintenance basics, and information on how to get a job as a lifeguard. Minimum age of 16 by the last day of the scheduled course. Parental permission required under the age of 18. Must pass Physical Competency Requirements. Fee required.

**MATH COURSES**

	<b>College Prep *All 1 Credit</b>	<b>Honors/AP *All 1 Credit</b>	<b>Electives *All ½ Credit unless otherwise stated</b>
<b>Grade 9</b>	<b>*All 1 Credit</b>		
	3093 Algebra I 3103 Geometry 3113 Algebra II	3091 Honors Geometry 3111 Honors Pre-Calculus	3128 Sports Statistics (½ credit)
<b>Grade 10</b>			
	3093 Algebra I 3103 Geometry 3113 Algebra II 3123 Pre-Calculus	3101 Honors Algebra II/Trig 3091 Honors Geometry	3089 Algebra I Connections 3090 Algebra II Connections 3128 Sports Statistics

Grades 11-12			
	3093 Algebra I 3103 Geometry 3124 Financial Algebra 3123 Pre-Calculus 3122 Intro. To College Math	3101 Honors Algebra II/Trig 3111 Honors Pre-Calculus 3121 AP Calculus 3125 AP Statistics 3126 AP Calculus BC	3089 Algebra I Connections 3090 Algebra II Connections 3128 Sports Statistics 0800 ACT/SAT Prep

### **0800 ACT/SAT Prep**

This computer-centered course prepares juniors and seniors for standardized college entrance exams through test-taking strategies and practice.

### **3089 Algebra I Connections, 3090 Algebra II Connections**

This course is designed for students who have not quite mastered the needed algebra skills taught in Algebra I and are necessary for proficiency in future math courses. The course content will cover combining like terms, writing equations in slope-intercept form given a variety of situations, solving for a variable given many different circumstances, factoring trinomials, distributing polynomials and ending with the introduction of rational functions. The first semester of this class is designed for Juniors or Seniors currently enrolled in Algebra II. This class, along with Algebra II, should bridge any gaps in mastery. The second semester is designed for students currently enrolled in Geometry. This class should front-load concepts for students prior to entering Algebra II and fill any gaps in instructional understanding.

### **3093 Algebra I**

This course will extend the mathematics that students learned in the middle grades. Students will develop fluency writing, interpreting, and translating between various forms of linear equations and inequalities, and use these forms to solve problems. Students will explore functions, including interpreting functions graphically, numerically, symbolically, and verbally and develop the ability to translate between representations. Students will be instructed in the use of regression techniques to describe approximate linear relationships between quantities. Students will create and solve equations, inequalities, and systems of equations involving quadratic expressions. Quadratic functions, including the ability to identify graphs and zeros will be explored.

### **3091 Honors Geometry**

In this course students will extend their knowledge of rigid motions to establish triangle congruence criteria. Triangle congruence criteria will be utilized as the basis to develop skills of formal proof. In a similar way, students will develop an understanding of similarity through triangles. Students will explore right triangles and apply trigonometric ratios to find missing measures of right triangles. Students' experience with two-dimensional and three-dimensional objects is extended to include informal explanations of circumference, area and volume formulas. Students will use rectangular coordinate system to verify geometric relationships, including properties of special triangles and quadrilaterals and slopes of parallel and perpendicular lines. Students will develop an understanding of how chords, tangents and arcs are related in circles and

extend their work of experimental probability to include conditional and compound events. In comparison to Geometry, this course provides an opportunity for in-depth study of geometric relationships, extended applications of the concepts and a synthesis of concepts to describe the world using geometric concepts.

### **3103 Geometry**

In this course students will extend their knowledge of rigid motions to establish triangle congruence criteria. Triangle congruence criteria will be utilized as the basis to develop skills of formal proof. In a similar way, students will develop an understanding of similarity through triangles. Students will explore right triangles and apply trigonometric ratios to find missing measures of right triangles. Students' experience with two-dimensional and three-dimensional objects is extended to include informal explanations of circumference, area and volume formulas. Students will use rectangular coordinate system to verify geometric relationships, including properties of special triangles and quadrilaterals and slopes of parallel and perpendicular lines. Students will develop an understanding of how chords, tangents and arcs are related in circles and extend their work of experimental probability to include conditional and compound events.

### **3101 Honors Algebra II w/Trigonometry**

Building on their work with linear and quadratic functions, students will explore the effects of transformations on graphs of diverse functions. They extend their work to include exponential functions and logarithms. Students will learn to perform operations such as addition, subtraction, multiplication, and division of polynomial and rational functions. In addition to extending their understanding of probability, students will identify different ways of collecting data including sample surveys, experiments, and simulations. Students will also extend their understanding of trigonometry to include periodic functions. In comparison to Algebra II, this course provides an opportunity for in-depth study of functions, extended applications of the concepts and synthesis of concept to describe the world using Algebraic concepts. **Recommendation: Graphing Calculator**

### **3113 Algebra II**

Building on their work with linear and quadratic functions, students will explore the effects of transformations on graphs of diverse functions. They extend their work to include exponential functions and logarithms. Students will learn to perform operations such as addition, subtraction, multiplication, and division of polynomial and rational functions. In addition to extending their understanding of probability, students will identify different ways of collecting data including sample surveys, experiments, and simulations. Students will also extend their understanding of trigonometry to include periodic functions. **Recommendation: Graphing Calculator**

### **3111 Honors Pre-Calculus**

This course builds upon the concepts students learned in Algebra II. Students develop their understanding of complex numbers through operations and representations on the complex plane. Students will extend their understanding of graphical representations to analyze systems of equations and logarithms. Students will strengthen their ability to model and build functions including further development of trigonometric functions. Students will apply probability models to make decisions. Students will be introduced to conic sections.

**Prerequisite: Algebra II**

**Recommendation: Graphing Calculator**

### **3123 Pre-Calculus**

This course builds upon the concepts students learned in Algebra II. Students develop their understanding of complex numbers through operations and representations on the complex plane. Students will extend their understanding of graphical representations to analyze systems of equations and logarithms. Students will strengthen their ability to model and build functions including further development of trigonometric functions. Students will apply probability models to make decisions. **Prerequisite: Algebra II**

**Recommendation: Graphing Calculator**

### **3124 Financial Algebra**

In this course students will investigate and solve relations of functions numerically, analytically, and graphically. Topics include solutions of polynomials, exponential systems of linear and nonlinear equations, matrix solutions, sequences and series and mathematical modeling. Students will learn algebra with financial applications.

### **3122 Introduction to College Math**

This is a ½-year statistics and ½-year calculus class. Statistics is taught in the 1st semester. The student will be introduced to various graphical displays of both univariate and bivariate data. They will explore normal distributions and touch upon binomial and geometric distributions. They will develop skills to accurately gather data through randomization while eliminating bias. Statistics will end with the development of the confidence interval and one variable hypothesis testing. In Calculus, the students will develop and work through limit ideas, both algebraically and graphically. They will discover the various uses/applications of the derivative, setting the groundwork for the algebraic and graphical ideas of integrals.

### **3121 AP Calculus AB**

AP Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The Advanced Placement Program curriculum covers topics including concepts and skills of limits, derivatives, definite integrals and the Fundamental Theorem of Calculus. This course teaches students to approach calculus concepts graphically, numerically and analytically. Upon successful performance on the AP exam, university credit can be earned.

**Requirements: Graphing Calculator**

**Prerequisite: Pre-Calculus**

*Students enrolled in this course are required to take the A.P. Exam in May.*

### **3126 AP Calculus BC**

AP Calculus BC is an extension of the differential and integral topics of Calculus AB, and is equivalent to two semesters of college level calculus (Calculus 1 and 2). Topics include concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. This course supports learners in making connections between graphical, numerical and analytical representations. Upon successful performance on the AP exam, university credit can be earned.

**Requirements: Graphing Calculator**

**Prerequisite: Pre-calculus**

*Students enrolled in this course are required to take the A.P. Exam in May.*

**3125 AP Statistics**

This is an introductory, non-calculus based college level course which introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will cover the four themes of exploring data, sampling and experimentation, anticipating patterns and statistical inference. Graphing calculators with statistical capabilities are an integral part of the course and of the AP exam.

**Requirements: Graphing Calculator.**

**Prerequisite: Algebra II**

*Students enrolled in this course are required to take the A.P. Exam in May.*

**3128 Sports Statistics**

This semester course brings a unique approach to the teaching and learning of introductory statistics. By using sports as a theme, students can better understand and appreciate the general topics. From data description through simple linear regression, each topic is discussed and explained via examples from the sports world. **Prerequisite: Algebra I**

**SCIENCE COURSES**

	<b>College Prep *All 1 Credit</b>	<b>Honors/AP *All 1 Credit</b>	<b>Electives *All ½ Credit unless otherwise stated</b>
<b>Grade 9</b>			
	2302 Physical Science	2401 Honors Biology	2304 Current Issues and Trends in Science 2600 Intro to STEM 2604 STEM Drone 2642 Forensics 2643 Astronomy
<b>Grade 10</b>			
	2403 General Biology 2507 General Chemistry (1 credit)	2401 Honors Biology 2423 AP Environmental 2500 Honors Chemistry 2641 AP Physics 1 2621 AP Biology 2645 Honors Human Anatomy and Physiology	2304 Current Issues and Trends in Science 2600 Intro to STEM 2604 STEM Drone 2642 Forensics 2643 Astronomy

Grade 11			
	2421 Environmental Science 2507 General Chemistry	2423 AP Environmental 2500 Hon. Chemistry 2641 AP Physics 1 2605 AP Physics 2 2621 AP Biology 2631 AP Chemistry 2645 Honors Human Anatomy and Physiology	2304 Current Issues and Trends in Science 2600 Intro to STEM 2604 STEM Drone 2642 Forensics 2643 Astronomy
Grade 12		Honors/AP	Electives
		2423 AP Environmental 2500 Hon. Chemistry 2641 AP Physics 1 2605 AP Physics 2 2621 AP Biology 2631 AP Chemistry 2645 Honors Human Anatomy and Physiology	2304 Current Issues and Trends in Science 2600 Intro to STEM 2604 STEM Drone 2642 Forensics 2643 Astronomy

### **2302 Physical Science**

This course introduces students to key concepts and theories that provide a foundation for further study in other sciences and advanced science disciplines. Physical science comprises the study of the physical world as it relates to fundamental concepts about matter, energy and motion. A unified understanding of phenomena in physical, living, Earth and space systems is the culmination of all previously learned concepts related to chemistry, physics and Earth and space science along with historical perspective and mathematical reasoning. **Fee Required**

### **2401 Honors Biology**

This course meets 7-8 periods a week (double period lab class). The course approaches the study of life sciences from the standpoint of molecules and is lab and research oriented. The major units within this course include: ecology, biochemistry, energy transformation, cell structure, cell function, genetics, and anatomy. **Fee Required**

### **2403 General Biology**

This course investigates the composition, diversity, complexity and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment and the interactions within and between them. Students engage in investigations to understand and explain behavior of living things in a variety of scenarios that incorporate

scientific reasoning, analysis, communication skills and real-world application. **Fee Required**

### **2421 Environmental Science**

This course incorporates biology, chemistry, physics and physical geology and introduces students to key concepts, principals and theories within environmental science. Investigations are used to understand and explain the behavior of nature in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications. **Fee Required**

### **2423 AP Environmental Science**

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. **Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **2500 Honors Chemistry**

This course meets 7-8 periods a week (double period lab class). The course of study includes: atomic structure, quantum mechanics, molecular geometry, chemical energy, and chemical equilibrium through analysis and interpretation of experimental evidence. **Fee Required**

### **2507 General Chemistry**

This course introduces students to key concepts and theories that provide a foundation for further study in other sciences as well as advanced science disciplines. Chemistry comprises a systematic study of the predictive physical interactions of matter and subsequent events that occur in the natural world. The study of matter through the exploration of classification, its structure and its interactions is how this course is organized. Investigations are used to understand and explain the behavior of matter in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications. An understanding of leading theories and how they have informed current knowledge prepares students with higher order cognitive capabilities of evaluation, predication and application. **Fee Required**

### **2600 Introduction to STEM**

This course introduces students to key concepts and theories in Science, Technology, Engineering and Mathematics. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and



scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions.

### **2602 Physics**

This course elaborates on the study of the key concepts of motion, forces and energy as they relate to increasingly complex systems and application that will provide a foundation for further study in science and scientific literacy. Students engage in investigations to understand and explain motion, forces and energy in a variety of inquiry and design scenarios that incorporate scientific reasoning, analysis, communication skills and real-world applications. **Fee Required**

### **2604 STEM Drone**

This course uses the Drone Smartz program and teaches students about drone flying, the legal and safety issues, and the regulations according to the Federal Aviation Agency and the Federal Communications Commission. The three areas of aviation, operations, equipment and personnel, will be taught. The hands-on experiences enable students to learn via a simulator and actual flight time. Students are required to complete research, and flight logs and maintain a personal portfolio to demonstrate training and competence as evidence of completion of this program. Students have the potential to earn their operator's certification.

### **2621 AP Biology**

This course meets 7-8 periods a week (double period lab class) and is equivalent to a first year college course. The course develops specialized content to extend connections, depth, and detail of biology, including concepts in anatomy, physiology, energy transfer, ecology, behavior, evolution, genetics, cell biology, biotechnology, diversity, growth, and human biology. **Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **2631 AP Chemistry**

This course meets 7-8 periods a week (double period lab class) and is equivalent to a first year college course. This course develops specialized content to extend connections, depth and detail of chemistry, including concepts in inorganic, organic, analytical, physical and biochemistry. **Prerequisite: Honors Chemistry; Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **2641 AP Physics 1**

Advance Placement Physics I is the first course in a two-course sequence that is an algebra-based college physics course which examines the physical laws and principles that govern nature. The general areas that are studied are motion, forces, energy, waves and electricity. The course will take these topics and not only provide information about them but will also show how these topics are relevant for the student's life. Emphasis will be placed on understanding the concepts of physics and then analyzing the concepts

mathematically. The problem-solving skills developed in this course are transferable to many areas outside of physics. The course is designed to be useful to students having widely differing backgrounds and career plans. Laboratory work is a vital and essential part of this course. **Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **2605 AP Physics 2**

Advance Placement Physics II is the second course in the two-course sequence that 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. **Prerequisite: AP Physics I, Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **2642 Forensic Science**

This course introduces students to forensic science. It is an inquiry-based course that uses many disciplines to analyze physical and biological evidence found at crime scenes. Units of study include: fingerprints, hair, fibers, drug & chemical analysis, trace evidence, blood, DNA, human remains, soil, and document/handwriting analysis. **Fee Required**

### **2643 Astronomy**

This course provides an in-depth study of our solar system, stars and constellations, the structure of the universe, and the dynamic nature of the cosmos. **Fee Required**

### **2304 Current Issues and Trends in Science**

This course gives students an understanding of how science affects the everyday world. The students will use topics from the news to drive scientific research.

### **2645 Honors Human Anatomy and Physiology**

This course will deepen students' understanding of the human body. Students will investigate the human body structure and its functions. The course will examine the structure and function of the major body systems including the skeletal, muscular, nervous, endocrine, circulatory, lymphatic, integumentary, digestive, respiratory, urinary, and reproductive systems. **Prerequisite: Biology; Fee Required**

**SOCIAL STUDIES COURSES**

	<b>College Prep *1 credit</b>	<b>Honors/AP *1 credit</b>	<b>Electives *½ credit unless otherwise stated</b>
<b>Grade 9</b>			
	1315 World History and Civilizations	1316 Honors World History and Civilizations	
<b>Grade 10</b>			
	1402 American History 1403 Honors American History	1504 AP Psychology  1621 AP US History	1502 Sociology 1503 Psychology 1510 U.S. Military: Past, Present, Future (1 credit) 1727 Microeconomics 1728 Macroeconomics
<b>Grade 11</b>			
	1506 American Government	1623 AP US Government and Politics  1504 AP Psychology	1502 Sociology 1503 Psychology 1510 U.S. Military: Past, Present, Future (1 credit) 1727 Microeconomics 1728 Macroeconomics
<b>Grade 12</b>			
		1630 AP European History  1504 AP Psychology	1502 Sociology 1503 Psychology 1510 U.S. Military: Past, Present, Future (1 credit) 1540 Comparative Religions 1622 European History (1 credit) 1624 Senior Seminar Post WWII 1625 Senior Seminar Modern Era 1727 Microeconomics 1728 Macroeconomics

**1315 Modern World History**

This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. Students will continue to develop their skills in historical thinking by locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions, analyze the credibility of sources, develop hypotheses, and use evidence to support claims. Students will analyze cause,

effect and correlation in historical events, including multiple causation and long-and short-term causal relations. \*Requirement for graduating class of 2021 and beyond.

### **1316 Honors Modern World History**

This weighted course fulfills the district's requirement for World History. Although similar to Modern World History, the purpose of this course is to develop greater understanding of the evolutionary nature of the geographical, economic, social, political, cultural, and philosophical processes that form historical reality. Student understanding is advanced through a combination of factual knowledge and analytical skills and shall be evidenced through various oral and written exercises. \*Fulfills requirement for graduating class of 2021 and beyond.

### **1402 American History**

Students will examine primary and secondary sources and analyze these sources for credibility. Students will gain an understanding of how historians develop theses and use evidence to support or refute positions. Students will also analyze cause, effect, sequence and correlation in historical events, including multiple causation and long- and short-term causal relations. Students are required to take the end of course exam upon the completion of this course.

### **1403 Honors American History**

Students will examine primary and secondary sources and analyze these sources for credibility. Students will gain an understanding of how historians develop theses and use evidence to support or refute positions. Students will also analyze cause, effect, sequence and correlation in historical events, including multiple causation and long- and short-term causal relations. Students are required to take the end of course exam upon the completion of this course. In addition to American History students will study the Federalist vs Anti-Federalists and explore the history between the American Revolution and the Civil War

### **1506 American Government**

Students will develop the skills necessary for active participation in civic affairs and have opportunities to engage societal problems and participate in opportunities to contribute to the common good, through governmental and nongovernmental channels. This course fulfills the Government Graduation requirement and financial literacy standards. Students are required to take the end of course exam upon the completion of this course.

### **1502 Sociology**

This elective is designed to survey the science of society by examining the structure, relationship, roles and function of groups. Students will study the history and content of culture, including the major institutions of society (family, religion, and education), the process of socialization, and social classes and stratification in society. Social problems in contemporary America and current events associated with those issues are researched and discussed.

### **1503 Psychology**

This elective is a survey course which includes study in the following areas: psychology as a science, learning and understanding human behavior, patterns of behavior (including motivated and emotional behavior) and mental health and human interaction, attitudes and social influence.

### **1504 AP Psychology**

The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.

**Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **1510 U.S. Military: Past, Present, Future**

This course will explore the various roles the United States Military has culturally taken in the past and its actions in the past as defenders of our society. Students will discover the Military's role today, explore what are the possible future roles it may take, and analyze the short and long term impacts on life enlistment into Military Service. **Prerequisite: American History**

### **1540 Comparative Religions**

This course studies the religions of the world. Spirituality and religion are a fundamental part of the human experience, often defining cultures and establishing social norms. Students will learn how different people approach religion and spirituality and gain an appreciation for the impact religion has had on the world. Students will explore Hinduism Christianity, Judaism Buddhism, Islam, Confucianism, Taoism and several other religions and religious practices without bias. **Fee Required**

### **1621 AP US History**

The AP US History course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university US history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP US History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. It also allows teachers flexibility across nine different periods of US history to teach topics of their choice in depth. Students are required to take the end of course exam upon the completion of this course.

**Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*

### **1623 AP US Government and Politics**

This course is designed to enable students to develop a critical perspective of government and politics in the United States. The nature of the American political system, its development over the past two centuries, and how it works today, is examined. This course addresses financial literacy standards. The College Board curriculum will be followed.

**Fee Required,** *Students enrolled in this course are required to take the A.P. Exam in May.*

### **1622 European History**

This elective course provides a college-level study of European history from 1300 to present day. It is designed to help accelerated students, who have already fulfilled their social studies graduation requirements, to understand the history of Europe, its people, cultures, economics, politics, and institutional structures.

### **1624 Senior Seminar I Post World War II Era and 1625 Senior Seminar II The Modern Era**

These courses will offer seniors a study and interpretation of major events which shaped political thought using primary sources as a text.

### **1630 AP European History**

This course is the study of European history since 1450 and introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. This knowledge provides the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. This course uses the primary text used in the 1622 European History course, in addition to other supplemental resources, and moves at a comparatively faster pace that is reflective of a college course.

**Fee Required,** *Students enrolled in this course are required to take the A.P. Exam in May.*

### **1727 Microeconomics and 1728 Macroeconomics**

These courses will be theory based. Students will understand economic graphs, ratios, and laws from a microeconomic and macroeconomic perspective. These courses address financial literacy standards.

WORLD LANGUAGE COURSES (German is offered at North High School Only)

<b>Grades 9</b>	<b>*All 1 credit</b>
	4301 French I 4401 French II 4304 Spanish I 4404 Spanish II
<b>Grade 10</b>	<b>*All 1 credit</b>
	4301 French I 4401 French II 4501 French III 4304 Spanish I 4404 Spanish II 4504 Spanish III 4402 German II
<b>Grade 11</b>	<b>*All 1 credit</b>
	4301 French I 4401 French II 4501 French III 4304 Spanish I 4404 Spanish II 4504 Spanish III 4604 Spanish IV Honors 4402 German II 4502 German III
<b>Grade 12</b>	<b>*All 1 credit</b>
	4301 French I 4401 French II 4501 French III 4601 French IV Honors 4304 Spanish I 4404 Spanish II 4504 Spanish III 4604 Spanish IV Honors 4704 AP Spanish 4402 German II 4502 German III 4602 German IV Honors

### **4301 French I, 4304 Spanish I**

These courses are an introduction to communicating in a world language by means of building basic vocabulary and developing skills of listening, speaking, reading and writing. Classes include an introduction to culture in the various countries where the languages are spoken.

### **4401 French II, 4402 German II, 4404 Spanish II**

Vocabulary is expanded and skills in conversation, grammar, reading, writing and listening are further developed. Historical and cultural information about target countries continues.

### **4501 French III, 4502 German III, 4504 Spanish III**

These courses include further development of vocabulary and more complex grammar. Higher speaking, listening, reading and writing skills develop through literature, newspaper/magazine/internet articles, presentations and debates.

### **4601 French IV Honors, 4602 German IV Honors, 4604 Spanish IV Honors**

These courses provide an advanced study and usage of the language with the goal of providing a solid basis for application at the university level and /or the ability to waiver some or all of the world language requirements. Students will be exposed to practice University Language Placement Tests. Students will be involved in many projects and oral presentations to improve their language usage and to encourage their ability to self-express in creative, thoughtful and meaningful ways.

### **4701 French V Honors**

Honors will follow the College Board guidelines for an AP-level course. Written and oral proficiency will be the main objective gained from:

1. Formal/informal speech excerpts from several target language speaking countries;
2. Vocabulary, idiomatic expressions, syntactical definition from media, newspapers, and the internet;
3. Composition of expository paragraphs and essays;
4. Verbal expression emphasizing fluency and comprehension

### **4704 AP Spanish**

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). **Fee Required**, *Students enrolled in this course are required to take the A.P. Exam in May.*



## CAREER-TECHNICAL EDUCATION PROGRAMS

Excel TECC is a career technical consortium serving the ten school districts of Aurora, Beachwood, Chagrin Falls, Mayfield, Orange, Richmond Heights, Solon, South Euclid/Lyndhurst, West Geauga, and Willoughby-Eastlake offering 29 unique programs. The objective of Career-Technical education is to prepare students to enter a two- or four year college, a two-year technical school or the career of their choosing. Excel TECC provides programs located throughout our districts as well as the Mayfield Innovation Center, Gates Mills Environmental Education Center, Cuyahoga Community College, Cleveland Botanical Gardens, Northern Career Institute (NCI) Eastlake and Northern Career Institute (NCI) Willoughby. Students in Excel TECC programs are eligible to receive college credit upon successful completion of their program according to Tech Prep standards and may receive anywhere from one to twenty-nine college credits. Excel TECC students may also participate in CCP programs. Students interested in participating in CCP while in Excel TECC should contact their guidance counselor for more information and be sure to follow all policies and procedures regarding CCP.

Some programs require students to travel away from their home school and spend a portion of the day at the program site. If the student spends a partial day attending the program, students will return to their home school for academic subjects. When considering Ohio Tech Prep options, it is important to know that:

- Transportation is provided
- Students graduate from their home high school
- Students can participate in home high school extra-curricular activities
- Most programs are two-years, beginning in the junior year
- An application process is required
- Articulation and college credit may be available to successful completers

Application to Excel TECC programs is an on-line process beginning in December. Students choose up to two programs and parents check a “sign-off” box on the application. Application information will be available through high school counselors. Students will receive an interview for any program they have applied to.

By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in Mathematics and English (except intervention programs).

Once enrolled in a two-year tech prep program, **the junior will be expected to remain in that program for the two years.**

**Fee and equipment charges are required for all tech prep programs.** Students will be given a list of these charges by their instructors at the beginning of the course. Excel TECC offers the following college tech prep programs:

## OHIO COLLEGE TECH PREP PROGRAMS

Career-Technical Programs	Location
9637 Allied Health 1	NCI - Eastlake
9636 Allied Health 2	NCI - Eastlake
9572 Agriculture Career Exploration	Gates Mills Environmental Education Center
9512 Auto Collision 1	NCI - Willoughby
9612 Auto Collision 2	NCI - Willoughby
9427 Auto Services 1	NCI - Willoughby
9428 Auto Services 2	NCI - Willoughby
9306 Business Academy 1	NCI - Willoughby
9307 Business Academy 2	NCI - Willoughby
9710 CADD Engineering Technology 1	Mayfield Innovation Center
9715 CADD Engineering Technology 2	Mayfield Innovation Center
9575 Career Based Intervention	Gates Mills Environmental Education Center
9576 Career Based Intervention	Cuyahoga Community College
9573 Cleveland Botanical Garden	Cleveland Botanical Garden
9542 Construction Trades 1	Mayfield High School
9543 Construction Trades 2	Mayfield High School
9518 Cosmetology 1	NCI - Willoughby
9618 Cosmetology 2	NCI - Willoughby
9545 Culinary Arts 1	Beachwood High School
9645 Culinary Arts 2	Beachwood High School
9563 Digital Arts and Technology 1	Aurora High School
9564 Digital Arts and Technology 2	Aurora High School
9565 Fire/EMS Training Academy 1	Cuyahoga Community College
9566 Fire/EMS Training Academy 2	Cuyahoga Community College
9574 Floriculture and Gardening Operations	Gates Mills Environmental Education Center
9711 Information Technology and Programming 1	Mayfield High School
9713 Information Technology and Programming 2	Mayfield High School
9516 Interactive Media 1	Mayfield High School
9616 Interactive Media 2	Mayfield High School

Career-Technical Programs	Location
94399 Job Training Program	NCI - Willoughby
9546 Landscape and Turf Operations 1	Gates Mills Environmental Education Center
9547 Landscape and Turf Operations 2	Gates Mills Environmental Education Center
9634 Licensed Practical Nursing 1	NCI - Eastlake
9635 Licensed Practical Nursing 2	NCI - Eastlake
9520 Marketing Communications (Grade 12 Only)	Beachwood High School
9632 Medical Assisting 1	NCI - Eastlake
9633 Medical Assisting 2	NCI - Eastlake
9567 Medical Technologies 1	Mayfield High School
9568 Medical Technologies 2	Mayfield High School
9570 Performing Arts Academy 1	Chagrin Falls High School
9571 Performing Arts Academy 2	Chagrin Falls High School
9595 Studio Art and Design 1	Orange High School
9695 Studio Art and Design 2	Orange High School
9540 Teacher Education and Children's Health 1 (TEACH 1)	Fairmount Early Childhood Center at Beachwood
9672 Teacher Education and Children's Health 2 (TEACH 2)	Fairmount Early Childhood Center at Beachwood
9527 Welding 1	NCI - Willoughby
9627 Welding 2	NCI- Willoughby

## **Allied Health (Nursing Assistant)**

### **9637 Allied Health 1**

Consists of 9636a: Principles of Allied Health and 9636b: Patient Centered Care Terminology

### **9636 Allied Health 2**

Consists of 9637c: Pharmacology and 9637b: Medical Terminology

**Location:** NCI, Eastlake

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school. Clinical

**Requirements:** During the junior and senior years, students attend clinical sites and will need to provide their own transportation to and from the sites. Students must pass a BCI background check, negative drug screen and submit evidence of other health screening requirements, which are required by the clinical sites. Students must also successfully pass CPR (training provided during the course) prior to attending clinicals.

**Articulated College Credit:** Lakeland Community College-up to 6 credits;  
University of Akron up to 10 credits; Tri-C: up to 4 credits; 3 credits (CTAG) for Medical Terminology

**Certifications Available:** State Tested Nursing Assistant (STNA), CPR, and Medication Aide (pending Ohio Board of Nursing program approval).

This program is designed to provide the basic health-care skills necessary for an entry level position in health care. Upon completion of the program and passage of certification exams students can begin a career as a State Tested Nursing Assistant (STNA) and/or Medication Aide. Students will learn to assist patients with daily living and fundamental tasks, assist in a health care setting, and prepare sterile environments.

## **Auto Collision**

### **9512 Auto Collision 1**

Consists of 9512a: Collision Nonstructural Inspection and Repair and 9512b: Collision Painting and Refinishing

### **9612 Auto Collision 2**

Consists of 9612a: Collision Structural Inspection and Repair and 9612b: Collision Electrical and Mechanical **Location:** NCI, Willoughby

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school. The Auto Collision program is designed to teach students the complete cycle of repairing automobiles and other vehicles damaged from normal “wear and tear” or from accidents and collisions. The knowledge and skills covered include shop safety, use of hand and power tools, rust repair, sheet metal repair, body panel replacement, fiberglass repair, unibody and frame repair, custom fabrication, custom painting, MIG welding, detailing

and customer service. ASE and NATEF certifications are available for qualified students.

Job opportunities for those completing this program include: body repair shops, auto dealerships, wholesale or retail parts and paint sales, frame shops, front end shops, custom shops, auto recycler, shop foreperson and major claims insurance adjuster. The Ohio Technical College offers advance placement in Auto Collision repair and Refinishing Technologies. College credit is also available through Cuyahoga Community College. In addition to classroom training, senior-level students who meet the established requirements may be permitted to work at an Auto Collision related job during the second semester of their senior year.

### **Auto Services**

#### **9427 Auto Services 1**

Consists of 9427a: Ground Transportation Maintenance, 9427b: Automotive Braking, Suspension, and Steering Systems

#### **9428 Auto Services 2**

Consists of 9428a: Ground Transportation Electrical/Electronics and 9428b: Automotive Engine Performance **Location: NCI, Willoughby**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have complete coursework required for junior status at their home school.

The Auto Services program is a “hands on” learning environment, and experience is gained by performing many aspects of customer service. Students in the 1<sup>st</sup> year of the Auto Services program will be taught to use a computerized 4-wheel alignment machine and computerized wheel balancer and gain experience with tire pressure monitoring systems. Students will also have the opportunity to receive the SP2 safety certificate and The Valvoline Motor Oil Basics Certificate. Students will remove and replace various steering and suspension components, brakes and exhaust systems and will use MIG welding and Oxy fuel torches.

Second year students will use a variety of advanced computerized scan tools from SnapOn and Bosch to diagnose and repair drive train, emission, electrical issues such as AntiLock Brake systems and check-engine lights. Students will be introduced to drive train, transmission and engine repair. Students will also be introduced to the maintenance and repair of sports and recreational vehicles such as ATVs and motorcycles.

### **Business Academy**

#### **9306 Business Academy 1**

Consists of 9306a: Business Foundations and 9306b: Management Principles

#### **9307 Business Academy 2**

Consists of 9307a: Strategic Entrepreneurship and 9307b: Marketing Principles

**Location: NCI, Willoughby**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

**Articulated College Credit:** A maximum of 14 college credits are available through Cuyahoga Community College.

The Business Academy is a dynamic, comprehensive program which will introduce students to the exciting professional world of Business. Students will explore several diverse career areas including Entrepreneurship, Marketing, Commerce, Management, Personal Finance, Project Management, International Business, Business Law, Finance, Operations and Management. The objectives of the Business Academy are to prepare students for transition to college, technical school or employment and to connect, collaborate and compete in a global economy. An emphasis on communication, critical thinking, strong work ethic, goal setting, productivity, leadership and teamwork will provide students with a solid foundation for success. Students will have an opportunity to participate in DECA, a Career Technical Student Organization. Students will be encouraged to participate in an Internship experience during their senior year. Course content will include creating a viable Business Plan, Personal Financial Literacy, Marketing Ethics, Finance, Social Responsibility, developing Business Relationships, Leadership, Customer Relations, and Professional Development. The latest technology will be fully integrated to facilitate and foster collaboration and teamwork in a professional environment.

### **CADD Engineering Technology**

**9710 CADD Engineering Tech 1**

**9715 CADD Engineering Tech 2**

**(Computer-Aided Design/Drafting)**

**Location: Mayfield Innovation Center**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

High school students interested in any engineering or Architectural field, with strong mathematics and science skills, an interest in how things are made and work and an interest in design and product invention are ideal candidates for the CADD Engineering Technology course.

**Articulated College Credit:** Students who complete the program have the opportunity to earn up to sixteen semester hours of college credit.

CADD I, the first year of a two-year program located at Mayfield Innovation Center meets daily for lab and lecture activities. The program gives high school juniors interested in

Science, Technology, Engineering, and Mathematics (STEM) careers a head start on mastering core concepts and techniques critical to success in these areas. CASS, a College Tech Prep program, stresses academic/scholastic achievement, problem-based technical skill development, and work ethics principles critical to success beyond high school. Foundational knowledge such as engineering vocabulary, principles, practices, and techniques form the basis for interactive daily lessons. Competencies include mechanical, manufacturing, electronic and fluid topics such as 2D and 3D design, assembly drawings, product simulation, stress analysis, computer numerical control, rapid prototyping/3D printing, electricity and manufacturing operations. Students use cutting-edge software and tools in daily class activities and competitions for key exposure to engineering fields for the future. Specific software program selections may vary, but will include AutoCAD, Solidworks and Revit applications, as well as applications to support Fabrication Lab equipment. Students may also have the opportunity to intern with outside businesses.

CADD II, a continuation of the CADD I program, builds on previously learned concepts and principles. Competencies focus on Architectural design, including site/foundation planning, plan development and electrical, mechanical and structural concepts. Later in the year, emphasis is placed on developing specialization(s) within Engineering or Architectural areas of interest. The instructor will assume more of a facilitating role working one on one with each student. Students will be involved in collaborative and independent learning activities based on individual interest and competitions. Students may also have the opportunity to intern with outside businesses. New concepts and techniques will be exposed based on student interest, pace of CADD I, and outside involvement and/or need(s) of corporations, colleges, and the community.

### **Construction Trades**

#### **9542 Construction Trades I**

#### **9543 Construction Trades II**

#### **Location: Mayfield High School**

3 credits through Cuyahoga Community College

6 credits through Lakeland Community College

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

The Construction Trades program will prepare students to enter the workforce or to continue education at the post-secondary level. Students will learn basic skills in construction management, safety and in the following trade areas: house framing, masonry, gutters, siding, roofing, plumbing, electrical, painting, carpentry, deck building, dry wall, floor coverings, wall papering and simple home repairs by building homes in the classroom. Students will also experience onsite work learning, how to estimate jobs along with reading blueprints. Students will get the chance to get real life job experience by providing home improvements in the community. In the second year of Construction Trades students will have the opportunity to maintain a construction related job during

the day. Students would work a minimum of 15 hours per week, and must provide their own transportation. Students will be required to take an end of course exam.

### **Cosmetology**

#### **9518 Cosmetology 1**

#### **9618 Cosmetology 2**

**Location:** NCI, Willoughby

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school.

The Cosmetology two-year program is designed to introduce students to fundamental training and experiences needed for successful Ohio State Board of Cosmetology licensing. The knowledge and skills include sanitation procedures, anatomy and physiology, basic chemistry, business management, hair care procedures, skin care, nail care, salon safety procedures, English composition, a 120-hour salon internship and professional ethics. Students will practice on mannequins. Upon successful testing, the students will practice on customers in a salon setting at the school.

**Recommendations:** Good disciplinary and attendance records.

**Articulated College Credit:** College credit is available to successful completers through Lakeland Community College.

**Certifications Available:** Upon successful completion of the two-year program and the accumulation of 1500 hours, students are eligible to take the State Board of Cosmetology Examination for a cosmetology license.

### **Culinary Arts**

#### **9545 Culinary Arts 1**

#### **9645 Culinary Arts 2**

**Location:** Beachwood High School

Career Technical Credit Transfer Program (CT2)

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

**Certifications Available: ProStart**

Culinary Arts I: The purpose of the Culinary Arts I program is to offer on-site training in our public restaurant to high school juniors showing interest and aptitude for the food service industry. The first year of this two-year sequence consists of a supervised in school restaurant experience and related instruction. Using the nationally recognized ProStart curriculum, students will develop basic skills in food preparation, proper use and care of materials and equipment, compliance with state and local sanitary codes, organizational structure, job descriptions, planning, production, food ornamentation, catering and dining service. Culinary Arts I also focuses on Serve Safe Training and Certification. Successful completion of this training may be applied toward college requirements. This certification program is an industry standard. The Culinary Arts I



Program meets for 3 ¼ hours daily (10:00 a.m. – 1:45 p.m.) Students drive or take a bus directly to Beachwood after completing required classes at their home schools in the morning.

Culinary Arts II: This program meets for 1-1/2 hours daily (7:45 a.m.-9:15 a.m.) Students drive or take a bus directly to Beachwood in the morning and return to their home school for the remainder of the school day. The internship component allows the students to work in the food industry after school and weekends a minimum of 12.5 hours per week to receive credit and earnings. Students must provide their own transportation. The Culinary Arts II ProStart curriculum is endorsed by the National Restaurant Association Educational Foundation and provides each student earning a certificate of achievement with articulated college credit. ProStart teaches culinary mathematics, restaurant business management and marketing techniques and industry career information. Topics such as: employability skills, menu planning and design, cost extension/markup, restaurant design and equipment analysis are also addressed.

### **Digital Arts and Technology**

#### **9563 Digital Arts and Technology 1**

#### **9564 Digital Arts and Technology 2**

#### **Location: Aurora High School**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits earned in English and Mathematics. Recommended GPA: 2.5 or better.

3 credits each year.

Be sure to read all requirements before committing to this program.

The Digital Arts and Technology program is geared towards the students who are interested in digital photography, videography, audio engineering, cinematography, graphic design and digital media. Students will receive training on how to market the aforementioned skills and advance their careers or post-secondary education. Basic photography and camera skills are taught using our array of DSLR cameras, studio lighting, strobes, and software such as Adobe Lightroom and Photoshop. The videography/cinematography component of the program involves music videos, short films, documentaries, presentations and special effects. Students utilize high-end DSLR and cinema cameras and software to professionally edit video. A third tier of Digital Arts and Technology is audio engineering. We use industry standard audio recording and mixing software and Avid Pro Tools. Students will learn the basics of audio by means of recording techniques, microphone placement, and mixing. First year students meet every day in the morning where all aspects are taught to a basic level. Students will be encouraged to gravitate towards their desired area of specialization. Throughout the two years, students will learn 21<sup>st</sup> century skills in digital arts, professional networking, and technology. Students will create their own online portfolios that they will take with them

into the job market. Most importantly, everything is taught from a business standpoint so these skills can be utilized in the business world. Senior year for three days a week, students are provided with the opportunity to obtain and maintain an internship, throughout the entire school year. Students are able to work for, and alongside professionals in the related field. The internship opportunity will provide unparalleled real life experience, help develop respect and understanding for the field and provide a foundation for professional network.

### **Fire/EMS Training Academy**

#### **9565 Fire/EMS Training Academy 1**

#### **9566 Fire/EMS Training Academy 2**

Partnered with Cuyahoga Community College

22 semester credits available through CT2

**Location: EMT Basic (Tri-C East Campus); Firefighting Level 1 and 2 (Tri-C West Campus)**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics. **To enter the EMT/Fire Academy all students are required to have a physical on file by the start of their junior year.** Be sure to read all requirements before committing to this program.

**Recommendations:** Good discipline record, good study habits

**Recommended for:** College Bound/Technical Education

3 credits each year

**Articulated College Credit:** Up to 22 semester credits available, Cuyahoga Community College, The University of Akron, CT2.

**Certifications Available:** NREMT, State of Ohio Professional Firefighter I & II or APCO Dispatch.

Would you rather fight fires and cut up cars, or push papers? Do you prefer working in a fast paced environment or sitting behind a desk? Do you have passion, discipline, drive, courage, self-motivation, and most importantly, the concern for the well-being of others and the desire to give back to the community? If you have what it takes to become a Firefighter and EMT and you are in good physical condition, look no further!

The Fire/EMS Training Academy is partnered with Cuyahoga Community College and is a two-year commitment. Students have the potential (provided you meet all requirements of the program) to take the National Registry Emergency Medical Technician (NREMT) and State of Ohio Professional Firefighter I & II Exam or APCO Dispatch certifications. Upon completion, students will be immediately employable after graduation.

The first year students learn the foundations of the Firefighting and EMS field, featuring a wide variety of practical learning experiences and related academic classes. Students will be exposed to and become proficient in foundational skills necessary in the Fire and EMS career, including: communications, leadership and teamwork, problem solving skills,

safety and wellness, ethical and legal responsibilities, employability skills, CPR/First Aid Training and the ability to assess and provide treatment to patients.

The second year, students will spend the entire year at Tri C Western Campus at the Public Safety Training Building. First semester students will be enrolled in a college level EMT class and the second in either the Fire Academy or Communication/Dispatch class. It should be stressed that the EMT and Firefighting programs are at a college level and students must achieve and maintain an 80% grade average and meet the attendance requirements in order to be eligible to sit for the NREMT and Firefighting examination.

### **Information Technology and Programming**

#### **9711 Information Technology and Programming 1**

#### **9713 Information Technology and Programming 2**

#### **Location: Mayfield High School**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits earned in English and Mathematics.

**Recommendations:** Good attendance and disciplinary record **Recommended**

**for:** College bound students pursuing high tech careers.

3 credits each year

**Articulated College Credit:** 10 college credits through Lakeland Community College  
13 college credits through Cuyahoga Community College  
3 college credits through The University of Akron  
9 college credits through CT-2 Ohio Board of Regents

Information Technology and Programming (ITP) is highly recommended for students with interests in any area of computer technology including programming, software and web development, game development, mobile application development, database, information systems and computer maintenance and repair. ITP provides the opportunity for students to continue their education following high school at university, community college or technical school, prepared to earn an Associates' or Bachelors' Degree. Students have the potential to earn up to 16 semester hours of college credit through Ohio College Tech Prep and Ohio Board of Regents University System of Ohio.

ITP is highly regarded as one of the top Information Technology programs in Ohio. Science 2002, ITP students have earned numerous major team and individual-student awards on the regional, state and national levels of competition including four consecutive Skills USA National Championships for Tech Prep Information Technology. Since 2001 over 95% of ITP graduated have enrolled in post-secondary education including two and four- year colleges and universities as well as technical programs and elite military training programs.

Over the two years of ITP the following topics are learned: programming and logic and modular design, principles of web design, operating system technology, programming languages, website development, networking, database and computer applications; problem solving techniques and methodology; teamwork, leadership and professionalism skills; communication, technical writing, public speaking and employability skills. In the first year,

all core-competency areas are covered providing a solid foundation on which our students can choose to build their future. In the second year, ITP students have the opportunity to choose their concentration area from a selection of Programming with C#, Programming with Java, Java Games Development, Mobile Applications Development, Web Design with Adobe Creative Suite or A+ Certification for Computer Hardware/Software Maintenance and Repair. The second year is further enhanced by collaboration with organizations such as Toastmasters International, Progressive Insurance Company's Enterprise Technology Group, and many other business and industry partners that provide Experiential Learning Opportunities for the ITP students. Competitive events give ITP students a realistic feeling for the high states nature of business and industry in our global economy. Through professional organizations such as Skills USA and Ohio College Tech Prep, ITP students have the opportunity to compete on the local, state and national level as individuals or teams.

### **Interactive Media**

#### **9516 Interactive Media 1**

#### **9616 Interactive Media 2**

#### **Location: Mayfield High School**

Students can earn 12-15 college credits for Lakeland Community College, Tri-C and the Art Institute of Pittsburgh after successfully completing the IM program.

**Prerequisite:** Interview conducted by the instructor with portfolio samples of hand drawn or digitally created artwork. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Interactive Media (IM) is highly recommended for students with interests in the area of art combined with digital technology such as digital art and design, digital photography, graphic design, animation, web authoring, special effects video, 3D design, and emerging interactive multi-media technologies. The computer hardware found in the classroom matches the professional graphic arts environment. Students utilize drawing tables, scanners, digital photo and video cameras, lighting and sound equipment, and computers with dual display monitors. Interactive Media students learn to use professional level computer software for design, image editing, drawing and animation, special effects video, web authoring, vector graphics and desktop publishing.

Students become confident communicating effectively and professionally with adult clientele by working with local non-profit organizations and small business clients in the classroom. Interactive Media students have done award winning projects for clients that include the Lake County Metroparks and the Hungarian Society of Cleveland. Students will have high probability for employment in a 21<sup>st</sup> century career in the arts because computers are the standard tools for many jobs in the art industry today. Interactive Media provides the opportunity for students to continue their education following high school at university, community college or technical school. Also included in the student's learning will be Business, Economics and customer service concepts as well as leadership, teambuilding, communication and problem solving skills.

## **Licensed Practical Nursing**

### **9634 Licensed Practical Nursing 1**

Consists of 9634a: Patient Centered Care and 9634b: Nutrition and Wellness

### **9635 Licensed Practical Nursing 2**

Consists of 9635a: Patient Centered Care and Diagnostics, and 9635b: Lifespan Development and Medical Intervention and 9635c: Medical Terminology

**Location:** NCI, Eastlake

**Prerequisite:** Interview conducted by the instructor. Must have a 3.0 cumulative GPA at time of interview and score a level 5 or above on WorkKeys Applied Math and Workplace Documents and a level 4 or above Graphic Literacy. By the program start date student must have completed coursework required for junior status at their home school.

**Clinical Requirements:** During the senior year, students attend clinical sites and will need to provide their own transportation to and from the sites. Students must pass a BCI background check, negative drug screen and submit evidence of other health screening requirements, which are required by the clinical sites. Students must also successfully pass CPR (training provided during the course) prior to attending clinicals.

**Articulated College Credit:** University of Akron-30 credits; (CTAG) transferrable to any 2 or 4-year college in Ohio- minimum of 30% of the technical nursing credits in a pre-licensure, associate degree nurse education program; 30 credits through Kent State University 3 credits (CTAG) for Medical Terminology

**Certification Available:** Licensed Practical Nursing (LPN), State Tested Nursing Assistant (STNA) and CPR.

This unique program is approved by the Ohio Board of Nursing, C.O.E, and the Ohio Department of Career and Technical Education. It is 1 of only 4 high school nursing programs in the state of Ohio. It progresses from the simple to complex in theory, skills and clinical practice. Some of the courses include: fundamentals of nursing which includes a skill lab component, body and structure, nutrition, professional relationships, pharmacology and medical/surgical nursing. Clinical experience is correlated with theory and is provided at local hospitals, rehab facilities, assisted living facilities and nursing homes.

Upon successful completion of the nursing course, the graduate takes the Ohio Board of Nursing examination which provides licensure for the graduate. Once licensed, the graduate nurse is able to provide comprehensive total nursing care to people of all ages.

### **ADMISSION REQUIREMENTS:**

1. Passage of a pre-entrance exam with a proficient score. Proficient scores generally indicate a moderate level of overall academic preparedness necessary to support learning of nursing-related content.

2. Minimum cumulative GPA of 3.0 at the time of application.

### **Marketing Communications**

#### **9520 Marketing Communications**

**Location: Beachwood High School – Grade 12 Only**

9 college credit through Lakeland Community College

**Prerequisite:** This program is designed for students entering their senior year.

Prerequisites include an interview conducted by the instructor and by the program start date student must have completed coursework required for senior status at their home school.

**Articulated College Credit:** Up to nine (9) college credits are available through Tech Prep Articulation Agreement with Lakeland Community College.

Marketing Communications is a college-preparatory course intended for students desiring to study business, marketing or a related field in college, start a business after graduation, or work immediately. Students will explore business topics through class instruction, marketing research engagement in small group debates, development of interpersonal communication and leadership skills, creative or effective persuasive presentations and discussion involving classroom to work world experience. All students are employed in diverse fields of choice and are evaluated at their work sites.

Students participate in DECA, the marketing leadership association for students to develop marketing skills outside of the classroom and to collaborate and be involved with other students across the country. Some DECA activities include volunteering, fundraising and business competitions that offer advancement to the state, national and international level. Students also belong to Junior Achievement.

### **Medical Assisting**

#### **9632 Medical Assisting 1**

Consists of 9633b: Medical Terminology and 9632b Patient Centered Care and Diagnostics

#### **9633 Medical Assisting 2**

Consists of 9633a: Lifespan Development and 9632a: Medical and Dental Office Technology (for the 2017/2018 School Year: 9633a: Lifespan Development and Medical Intervention and 9633b: Medical Terminology).

**Location: NCI, Eastlake**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school. **Clinical**

**Requirements:** During the senior year, students attend clinical sites and will need to provide their own transportation to and from the sites. Students must pass a BCI background check, negative drug screen and submit evidence of other health screening requirements, which are required by the clinical sites. Students must also successfully pass CPR (training will be provided during the course) prior to attending clinicals. **Articulated College Credit:** Lakeland Community College- 13 credits; University of Akron – 30 credits. 30 credits through Kent State University 3 credits (CTAG) for Medical Terminology

**Certifications Available:** Registered Medical Assistant (RMA) and CPR. Certified Phlebotomy Technician (CPT)

The Medical Assisting Program is designed to prepare students to handle both the clinical duties and administrative responsibilities in a medical setting. Students learn anatomy and physiology, medical office protocol, vital signs, and patient care. Medical terminology, medical ethics, office skills, and basic patient care are included. Classroom and clinical settings offer a variety of opportunities for learning.

### **Medical Technologies I and II**

**9567 Medical Technologies I**

**9568 Medical Technologies II**

**Location: Mayfield Innovation Center**

**6080 Wilson Mills Road**

**Mayfield Village, OH 44124**

**College Credit Plus Program**

**Grade 11**

**3 High School Credits**

**Grade 12**

**4 High School Credits**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school. This includes seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics

**Requirements:** Proof of current vaccinations, required blood titers, PPD, seasonal flu inoculation, criminal background check.

**Recommended for:** College Bound/Technical Education

**Articulated College Credit:**

4 college credits-Cuyahoga Community College

13 college credits – Lakeland Community College

9 college credits- The University of Akron

2 transferrable college credits to any 2/4 year public colleges in Ohio –CT2

**Be sure to read all requirements of Medical Tech 2 before committing to this program.**

**Medical Technologies** is intended for those students who are serious about an educational future in the medical/dental sciences. The program prepares students with an interest in the medical professions to develop the knowledge, attitudes, practices and technical skills to obtain employment in medical, dental and diagnostic treatment facilities. Medical Technologies prepares the student to continue their education in a post-

secondary institution in the medical/dental or diagnostic sciences. The medical Technologies students will participate in instructional, laboratory, and clinical experiences designed to equip the student for direct patient care, diagnostic, therapeutic and treatment options. As seniors, students will participate in a clinical experience in world renowned health care facilities that will include an in depth look at local medical/dental facilities. Students must be able to provide their own transportation to the clinical lab experience. Related subjects include Lifespan Human Growth and Development, Principles of Allied Health, Patient Centered Care and Diagnostics, AHA Healthcare Provider C certification, OSHA completion, Infection Control and Risk Management, Human Relations, disease pathology/treatment, Basic Electrocardiogram Interpretation and Medical Terminology.

### **Performing Arts Academy 1 and 2**

#### **9570 Performing Arts Academy 1**

#### **9571 Performing Arts Academy 2**

#### **Location: Chagrin Falls High School**

3 college credits through Cuyahoga Community College

**Prerequisite:** Audition consisting of two contrasting monologues or one monologue and one song, no more than 90 seconds each. Monologue texts and a list of recommended song selections will be posted on the Academy website. Students must be prepared to sing acappella. By the program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics. During the interview process a resume and a headshot or school photo, a letter of recommendation from a theatre, drama or music program student has attended and a character reference should be provided.

The Chagrin Falls Performing Arts Academy is a college preparatory program for high school juniors and seniors. Juniors are encouraged to attend in the morning but accommodations may be made for juniors to attend in the afternoon; seniors are required to be in the afternoon session. The Academy is an accredited, half-day high school program which takes place during school hours. The program will consist of acting, theatre, voice, voice for the stage and tech theatre training and performance education. This will include daily acting classes, plus classes in voice, movement, musical theatre, technical theatre, stage combat, makeup, history, vocal training, and audition labs. The acting class will consist of sessions of improvisation, scene study, Shakespeare, Styles physical technique, acting for the camera and two years studying Stanislavski technique. The voice class will include vocal exercises, dialects and monologues. There will be fully mounted productions and student plays along with special workshops led by guest artists from the professional theatre. The Academy produces eight productions a year. Students need only participate in one show a year. Students may audition for as many as fit their schedule. Students auditioning must clear their schedule to accommodate rehearsals and productions. Students must provide their own transportation to after school and evening events.



## **Studio Art and Design**

### **9595 Studio Art and Design 1**

Consists of 9595a: Business of Arts and Communications and 9595b: Visual Creation

### **9695 Studio Art and Design 2**

Consists of 9695a: Visual Design Primer and 9695b: Advertising and Communication

**Location: Orange High School**

**Prerequisite:** Studio art packet, portfolio, reference letter and interview

Do you **engage, invent, create...because we do.**

The expectation in Studio Art and Design is to prepare self-motivated, creative students for careers in the visual arts by developing a comprehensive portfolio for college acceptance.

Curriculum expectations:

- To embrace creative problem solving and visual communications while developing individual expressions within content, image and message.
- To analyze interdisciplinary connects that influence social and cultural contexts of visual imagery.
- To identify, examine and understand the aesthetic, stylistic and functional considerations of designing objects, environments and communications.
- To create a portfolio of art works that demonstrates high level of craftsmanship and conceptual understanding for display in various regional and national student exhibitions.

## **Studio Art and Design (Continued)**

- To develop and support a personal philosophy of art based on aesthetic theories and understanding of visual culture.
- To investigate and plan strategies for lifelong involvement and advocacy of the arts. This program is geared toward the student with an interest in a career opportunity in Painting, Art Education, Fashion Design, Architecture, Interior Design, Display Design, Graphic Design, Advertising, Illustration, Animation, Photography, Fine Arts, Product Design and more.

The Studio Art and Design program has created a networking consortium of professional artists presently employed in multiple careers in art. This consortium was designed to be a professional contact and resource to help guide parents and inspire students in their college choices and career information from a professional contact within the networking group including former alumni from area high schools. Each student's portfolio work will be created and prepared for college acceptance along with expectations to compete for merit portfolio scholarships. These alumni represent several universities and art institutes including:

- Columbus College of Arts and Design
- Cleveland Institute of Art
- Rhode Island School of Design

- Pratt Institute
- Parsons School of Design
- Maryland Institute College of Art
- School of the Art Institute of Chicago
- Syracuse University

### **Teacher Education and Children’s Health (TEACH)**

#### **9540 TEACH 1**

#### **9672 TEACH 2**

#### **Location: Fairmount Early Childhood Center at Beachwood**

**Prerequisite:** Interview conducted by the instructor. By the program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics. Be sure to read all requirements of the TEACH 2 program before committing to this program.

**Articulated College Credit:** Students also have the option to complete the Child Development Associate process with the guidance and support from their instructor as well as earn college credits towards a degree in any career field related to Child Development.

The Teacher Education and Children’s Health (TEACH) program prepares students to full a vital role in the education and health of children. High school students receive the **Teacher Education and Children’s Health (TEACH) (Continued)**

opportunity to teach and care for children in many different early learning environments. The first year of the program stresses basic skills needed to work with children and the students are provided with the opportunity to actively be engaged with children at our laboratory schools. In the second year, the students expand their experiences with opportunities to intern with children birth through school-age and other childhood professionals. Again, the students assume a different role in the classroom and gain knowledge and experience working with children. In related class, the students are involved in learning activities requiring higher order thinking skills where they create and implement many learning opportunities for children.

### **Welding**

#### **9527 Welding 1**

Consists of 9527a: Gas Metal Arc Welding and 9527b: Shielded Metal Arc Welding

#### **9627 Welding 2**

Consists of 9627a: Flux Cored Arc Welding and 9627b: Gas Tungsten Arc Welding

#### **Location: NCI, Willoughby**

**Prerequisite:** Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school.

**Articulated College Credit:** Successful completers may earn up to 16 semester hours of credit through Lakeland Community College

This two-year program trains students in SMAW, GMAW, GTAW, FCAW-GS, CAC, blueprint reading and shop safety. Students are taught the same skills that are taught at the Lincoln School of Welding. Related classroom instruction is also an important part of the Welding program. In related class, students learn the scientific theories and principles of welding as well as information on fabrication and welding different alloys. Blueprint reading and layout skills along with mathematics and other job skills are part of the related class. Community Service projects are stressed. Opportunities for trained welders include millwright welder, fabrication welder, tack welder, pipe welder, welding inspector and welding equipment tender.

## **ENVIRONMENTAL EDUCATION PROGRAMS**

**Agriculture Career Exploration (A.C.E)**  
**Cleveland Botanical Garden**  
**Floriculture and Gardening Operations**  
**Landscape Construction and Design**

### **Environmental Education Programs**

**Grades 10-12**

**EE1 and EE2**

**College Tech Prep**

**Prerequisite: Interview by instructor.**

**Recommendations: Good attendance and discipline record**

**3 credits each year**

**6 college credits through Ashland or Cuyahoga Community College**

These programs are designed to educate the student in practices of commercial horticulture, including ornamental landscaping, greenhouse production, public gardening, and floral design. Plants provide the basis for our ecosystems and our economies. The curriculum is designed to prepare students for a wide array of careers in horticulture by blending academics and the technical subject areas. All programs are considered Tech Prep in which students have the opportunity to earn up to 6 semester college credits through an articulation agreement with Ashland and Cuyahoga Community College. Students will be required to complete a co-op project. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College and the Agricultural Technical Institute in Wooster. Students enrolling in the program also become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association.

### **9572 Agriculture Career Exploration (A.C.E)**

**Location:** Gates Mills Environmental Education Center

**Prerequisite:** Interview conducted by the instructor and recommended by counselor and/or administrator.

This program offers 10<sup>th</sup>-12<sup>th</sup> grade students an exploration of the various Agriculture occupations with emphasis on entry level job skills. This work-study program is designed for selected students to explore agriculture-related careers while getting firsthand experience in the world of work. Students successfully completing various job shadow sites throughout the school year will have the opportunity to gain paid employment. While learning job skills, students will also gain knowledge in the areas of: employability skills, positive work habits, communication and interpersonal skills, basic floral design, landscape techniques, plant propagation and care, and general horticulture skills. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College, and the Agricultural Technical Institute in Wooster. Students enrolling in the program become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association.

### **9573 Cleveland Botanical Garden**

**Location:** Cleveland Botanical Garden

Cleveland Botanical Garden Program is for students that desire a career in landscape maintenance and public gardening. The garden houses 10 landscaped acres of permanent, award-winning displays and themed gardens which the students use for their classroom. The students are engaged by hands-on horticultural experiences as they work alongside their teachers and the knowledgeable CBG staff members in areas of interest. This program is designed for those students who wish to develop their landscaping skills, work habits, and knowledge to ultimately become successful workers in the horticulture industry and productive members of society. Entry employment opportunities are available and continuation of higher education is encouraged after completion of the program.

### **9574 Floriculture and Gardening Operations**

**Location:** Gates Mills Environmental Education Center

The Floriculture and Gardening Operations program is for students who wish to explore areas in the green industry before entering post-secondary training or the work force. The program offers the basics in landscape and golf course maintenance, gardening, greenhouse, floral, garden center and nursery operations. The program includes hands-on training by growing, maintaining, selling and designing with trees, shrubs, perennials, annuals, vegetables, houseplants and cut flowers. Students are encouraged to participate in a paid internship program to enhance the learning experience in specialized areas of horticulture. Opportunities are available for students to participate in community events, field trips, volunteer experiences, National Technical Honor Society, industry

certifications, local and state competitions and FFA. Students will also have the opportunity to make connection with industry professionals.

### **Landscape Construction and Design**

**9546 Landscape Construction and Design 1**

**9547 Landscape Construction and Design 2**

**Location: Gates Mills Environmental Education Center**

The Landscape Construction and Design Program is an intensive Tech Prep program designed for students who are serious about employment in the landscape industry and/or to prepare themselves for further education in a college, university, or trade school. The course uses a project based, problem based philosophy. The course provides students with hands-on work and instruction both on the horticulture campus and at off-site locations. Students will engage in topics such as landscape equipment operation, landscape design and estimating, plant identification and care, construction with stone, wood and precast pavers, and general maintenance of the landscape. Career opportunities include: landscape designer/architect, crew leader – landscape maintenance, park system maintenance, landscape/hardscape construction, and gardener.

## **INTERVENTION PROGRAMS**

**Agriculture Career Exploration (A.C.E)**

**Career Based Intervention at Gates Mills**

**Career Based Intervention at Tri-C**

**Job Training**

All students have the ability to learn, to establish a career plan and carry out their career path to gain success in their lives. The intervention programs are designed to assist students who possess barriers to career and academic success to establish a career path by using work based learning experiences and gaining competencies to achieve a successful path to career options. The intervention instruction is designed to help students recover credits, get back on track academically and establish career goals. Based on the student's age, potential career desires and academic credits they will be referred to the appropriate intervention program by the student's guidance counselor and/or principal.

**9572 Agriculture Career Exploration (A.C.E)**

**Location: Environmental Education Center, Grades 10-12**

**Prerequisite:** Interview conducted by the instructor and recommended by counselor and/or administrator

This program offers 10<sup>th</sup>-12<sup>th</sup> grade students an exploration of the various Agriculture occupations with emphasis on entry level job skills. This work-study program is designed for selected students to explore agriculture-related careers while getting firsthand experience in the world of work. Students successfully completing various job shadow sites throughout the school year will have the opportunity to gain paid

employment. While learning job skills, students will also gain knowledge in the areas of: employability skills, positive work habits, communication and interpersonal skills, basic floral design, landscape techniques, plant propagation and care, and general horticulture skills. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College, and the Agricultural Technical Institute in Wooster. Students enrolling in the program become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association.

### **9575 Career Based Intervention**

**Location: Gates Mills Environmental Education Center, Grades 9-10 Prerequisite:**

Interview conducted by the instructor and recommended by counselor and/or administrator

9<sup>th</sup> graders earn up to seven credits dependent upon student performance (2 Lab, 1 Related, up to 4 Virtual Learning), 10<sup>th</sup> graders earn up to eight credits dependent upon student performance (2 Lab, 1 Related, up to 5 Virtual Learning)

Career-Based Intervention (CBI) is a Career Technical Education Program designed for students in grades 9-10 who have barriers to achieving academic and career success. The program is designed to help students recover credits and improve academics.

### **9576 Career Based Intervention**

**Location-Mayfield High School**

**Grades 9-12**

**Prerequisite:** Interview conducted by the instructor and recommended by counselor and/or administrator. Students should be **15 years old** before the start of the school year, must attend class every day, and follow all the guidelines of the Mayfield City Schools while earning high school credit.

8 credits each year (1 – CBI Related, 3 – CBI Work (1 credit of work = 180 hours)) 5 additional courses comprised of both Traditional and Virtual learning Courses.

Students will have their school counselors forward their schedules to Excel TECC office. Students are responsible to meet their home school graduation requirements.

It is a mandatory requirement of this program that all juniors and seniors obtain outside employment within three weeks of the start of the program. If at any time the student is without employment they must attend CBI all day.

**Prerequisite:** Interview by Instructor and recommended by Counselor and/or Administrator. Students must be 15 years old before the start of the school year, must attend class every day and follow all guidelines of the Mayfield City Schools while earning high school credit.

Recommended for: Technical Education

Career-Based Intervention (CBI) is a career technical education program designed for students in grades 9-12 who are identified as disadvantaged (either academically or economically or both) and who have barriers to achieving academic and career success.

The program is aimed specifically at helping students become motivated toward education exploring work experience. The CBI program is designed to help students recover credits, improve academic competencies, graduate from high school, develop employability skills, implement a career plan and participate in a career pathway in preparing for careers.

CBI is based on the key principles of higher student expectations, studying the common curriculum of the school, providing authentic learning opportunities, having supportive structures and establishing a sense of belonging. In this program, the student must also work outside the school day and earn money as well as credit for graduation. Each student also receives job related instruction in class. The ultimate objective of the CBI program is graduation from high school with marketable skills and a career plan.

The main goal of CBI students in grades 9-12 is to be able to graduate and be able to learn employability skills to implement a career plan.

### **Job Training Program**

#### **94399 Job Training Program**

**Location:** NCI, Willoughby

**Prerequisite:** Interview conducted by the instructor; students must be at least 16 years of age; recommendation of IEP team.

The Job Training Program (JTP) emphasizes development of entry-level employability skills in order for students to be successful in the workplace. Training is designed to enhance each individual student/worker's potential. Under supervision, students receive hands-on real world experiences while developing at their own pace. Some training is done in class, while other work is done on job location sites. Students may participate in a group setting or participate in a one-on-one internship with our Project Assistant. The goal for all students is to develop safety skills, knowledge, attitudes and job skills in order to get and keep a job. Classroom instruction and learning activities focus on basic skills and attitudes associated with the current job market.

#### **94399 Job Training Program**

(Student Home School other than Willoughby-Eastlake) Grades 10-12

**Prerequisite:** Interview by instructor; students must be at least 16 years of age; recommendation of IEP team, counselor, or VOSE.

The Job Training program is an option for students who want an individualized program that enables them to gain relevant work experience and on-the-job training (based on individual interests) while completing their academic requirements for graduation. Working with the student, a progression toward competitive employment is determined. The majority of the training provided is through community-based placements with on-the-job mentoring and employer provided supports. Paid or unpaid placements are determined individually based on a student's prior experiences and job readiness.

Job placements are developed with considerations for proximity to the student's residence, and transportation-related requirements. Students meet for small group instruction weekly at their home schools. Job Training should be on the student's schedule for several instructional periods at the end of the academic day. To earn the maximum of 3 credits per year, a student must be engaged fifteen hours per week in a combination of paid or unpaid work experience, job search, and group instruction.

The flexibility of the Job Training sessions enables students to complete their academic requirements while earning elective credit from the job training experience. The outcomes of the program are: job search skills, employability skills, and paid work experience. Parental involvement is essential for accomplishing the goals of this program and facilitating the student's participation in the job placement. It is the responsibility of the student and family to arrange transportation to paid or unpaid work sites. However, training and supports in using public transportation are provided by the Job Training staff as needed. A student typically enrolls in the program for two years; however a one year enrollment option is offered for seniors.

**\*\*\*\*All Level II programs have the prerequisite of Successful completion of Level I. Course Descriptions related to CTE 9306a Business Foundations**

Subject Code: 141000

This is the first course for the Business and Administrative Services, Finance and Marketing career fields. It introduces students to specializations within the three career fields. Students will obtain knowledge and skills in fundamental business activities. They will acquire knowledge of business processes, economics and business relationships. Students will use technology to synthesize and share business information. Employability skills, leadership and communications and personal financial literacy will be addressed.

**9306b Management Principles**

Subject Code: 141025

Students will apply management and motivation theories to plan, organize and direct staff toward goal achievement. They will learn to manage a workforce, lead change, and build relationships with employees and customers. Students will use technology to analyze the internal and external business environment, determine trends impacting business, and examine risks threatening organizational success. Ethical challenges, project management and strategic planning will also be addressed.

**9307a Strategic Entrepreneurship**

Subject Code: 141030

Students will use innovation skills to generate ideas for new products and services, evaluate the feasibility of ideas, and develop a strategy for commercialization. Students will use technology to select target markets, profile target customers, define the venture's mission, and create business plans. Students will take initial steps to establish a business. Students will calculate and forecast



costs, break-even, and sales. Establishing brand, setting prices, promoting products, and managing customer relationships will be emphasized.

### **9307b Marketing Principles**

Subject Code: 144000

Students will obtain fundamental knowledge and skills in marketing communication, marketing management, marketing research, merchandising and professional selling. They will acquire knowledge of marketing strategies, market identification techniques, employability skills, business ethics and law, economic principles and international business. Technology, leadership and communications will be incorporated in classroom activities.

### **9427a Ground Transportation Maintenance**

Subject Code: 177000

In this first course, students will apply skills needed to inspect and perform general service on vehicles. Students will research applicable service information and technical service bulletins and perform maintenance on vehicles. Students will inspect and service engine, drive train, suspension, steering, electrical and braking systems. Students will perform ignition maintenance including spark plug/glow plug and ignition wire and coil pack replacement. Additionally, students change fluids and filters and inspect vehicles for leaks and fluid condition.

### **9427b Automotive Braking, Suspension, and Steering Systems**

Subject Code: 177003

Students will perform inspections, troubleshoot malfunctions and service automotive undercarriage systems. Students will identify poor performing hydraulic brake systems and replace malfunctioning components. Students will install coil and leaf springs, shock absorbers and struts, and replace wheel bearings. Students will inspect and replace automotive steering components and perform wheel alignments. Additionally, students will disable and enable supplemental restraint systems (SRS) and will replace antilock brake systems components.

### **9428a Ground Transportation Electrical/Electronics**

Subject Code: 177002

Student will diagnose and repair vehicle electrical systems, including chassis electrical, charging, starting and lighting systems. Students will learn the fundamentals of direct current (DC) electronics including series, parallel, and series parallel circuits. Students will use electronic diagnostic tools, read schematics, and utilize printed and electronic repair manuals to troubleshoot electrical circuits, test components and replace defective modules.

### **9428b Automotive Engine Performance**

Subject Code: 177006

Students will research vehicle service histories using model specific service bulletins. Students will test and diagnose for engine performance in fuel, air induction and exhaust systems using advanced testing procedures. Topics include computerized engine controls including retrieving and

recording diagnostic trouble codes using On Board Diagnostics (OBD). Additionally, students will diagnose drivability and emissions problems resulting from malfunctions of interrelated systems.

### **9450a Gas Metal Arc Welding**

Subject Code: 176000

Students will use the Gas Metal Arc Welding process (GMAW) to join various types of metal. They will cut metals using oxy-fuel processes and perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode wire, shielding gas and adjust welding equipment based on the physical characteristics and metal properties. Students will apply quality control factors to evaluate weld quality.

### **9450b Shielded Metal Arc Welding**

Subject Code: 176001

Students will be able to use the Shielded Metal Arc Welding process (SMAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply their quality control factors to evaluate the quality of welds.

### **9451a Flux Cored Arc Welding**

Subject Code: 176002

Students will be able to safely use the Flux Cored Arc Welding process (FCAW) to join various types of metal. They will perform multiple types of welds in all positions up to overhead. They will select the appropriate type of cored electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply their understanding of quality control factors to evaluate the quality of welds.

### **9451b Gas Tungsten Arc Welding**

Subject Code: 176003

Students will use the Gas Tungsten Arc Welding process (GTAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode, filler metal and shielding gas and be able to adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply quality control factors to evaluate weld quality.

### **9512a Collision Nonstructural Inspection & Repair**

Subject Code: 177011

Students will learn the skills and knowledge of automotive body panel repairs, replacements, and adjustments. Students will analyze, document and repair nonstructural collision damage. Students will remove corrosion protection, undercoating, sealer, and other protective coatings as necessary to perform repairs. Emphasis will be given to joining and cutting aluminum, steel and other metals.

Students will maintain tools and facilities while complying with personal and environmental safety practices.

### **9512b Collision Painting & Refinishing**

Subject Code: 177012

Students will restore and refinish vehicle exterior body and paint finish. Students will inspect and identify substrate, type of finish, surface condition, and film thickness and will develop and execute a plan for refinishing using a total product system. Students will inspect, clean, and determine condition of spray guns and related equipment. Additionally, students will observe safety precautions when using hazardous materials.

### **9527a Gas Metal Arc Welding**

Subject Code: 176000

Students will use the Gas Metal Arc Welding process (GMAW) to join various types of metal. They will cut metals using oxy-fuel processes and perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode wire, shielding gas and adjust welding equipment based on the physical characteristics and metal properties. Students will apply quality control factors to evaluate weld quality.

### **9527b Shielded Metal Arc Welding**

Subject Code: 176001

Students will be able to use the Shielded Metal Arc Welding process (SMAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply their quality control factors to evaluate the quality of welds.

### **9595a Business of Arts and Communications**

Subject Code: 340006

A growing number of professionals make a living in industries related to arts and communications. From event management to tracking expenses, students learn the business side of visual, media and performing arts. Topics include marketing, branding, producing, promoting, booking, budgeting and merchandising, etc. Students learn and apply intellectual property rights, licensing, copyright, royalties, liabilities and contractual agreements. They learn how both profit and non-profit organization businesses operate.

### **9595b Visual Creation**

Subject Code: 340315

A keen eye for detail, art elements, design principles and styles of art are essential to the world of visual communications. Students learn proper composition with such principles as color theory, typography and drawing. They create designed targeted for the Internet and for two- or three dimensional products while adhering to copyright laws and deadlines.

### **9612a Collision Structural Inspection & Repair**

Subject Code: 177010

Students will perform automotive collision repair of full and unibody frames and attach nonstructural components. Students will apply the skills and knowledge needed to measure and diagnose structural damage, create a parts list, and determine labor costs. Students will remove and replace damaged structural components. Emphasis will be given to joining and cutting aluminum, steel and other metals. Students will maintain tools and facilities while complying with personal and environmental safety practices.

### **9612b Collision Electrical & Mechanical Systems**

Subject Code: 177009

Students will perform inspections and repair electrical and mechanical damage due to collision. Topics include electrical and wiring harness, suspension, and braking and cooling system repairs. Students will service supplemental restraint systems (SRS) and ensure the integrity of the systems.

### **9627a Flux Cored Arc Welding**

Subject Code: 176002

Students will be able to safely use the Flux Cored Arc Welding process (FCAW) to join various types of metal. They will perform multiple types of welds in all positions up to overhead. They will select the appropriate type of cored electrode and adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply their understanding of quality control factors to evaluate the quality of welds. \

### **9627b Gas Tungsten Arc Welding**

Subject Code: 176003

Students will use the Gas Tungsten Arc Welding process (GTAW) to join various types of metal. They will perform multiple types of welds and joints in all positions up to and including overhead. They will select the appropriate type of electrode, filler metal and shielding gas and be able to adjust welding equipment based on the physical characteristics and properties of the metal. Students will apply quality control factors to evaluate weld quality.

### **9632a Medical and Dental Office Technology**

Subject Code: 072155

Students will apply fundamental principles of communication, leadership, technology and management as it applies to the medical office setting. Students will demonstrate documentation and record keeping procedures set forth by national accrediting organizations.

### **9632b Patient Centered Care and Diagnostics**

Subject Code: 072055

In this course, students establish and implement treatment plans while providing primary nursing care. Topics include pharmacology, phlebotomy, mental health nursing and acute care nursing. Students use diagnostic techniques to develop patient health assessments. Emphasis is placed on the synthesis of information gathered through health history, observation, and the detection of

deviations and variations from normal physical characteristics. In addition, students learn the legal and ethical principles needed to function within the scope of practice.

### **9633a Lifespan Development and Medical Intervention**

Subject Code: 072060

Students gain necessary skills and knowledge to meet the needs of individuals from infancy through the human life cycle in a safe, legal, and ethical manner using the nursing process. Topics include physical, psychological, and cultural variations associated with maturing and aging. Emphasis will be placed on regulatory compliance, patient assessment, patient safety, and medical interventions. Additionally, students use psychomotor nursing skills to assist in day-to-day patient care activities.

### **9633b Medical Terminology**

Subject Code: 072150

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

### **9634a Patient Centered Care**

Subject Code: 072050

Students will apply psychomotor nursing skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a nursing assistant plan of care. Students will collect patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform phlebotomy procedures with emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students will observe patients' physical, mental, and emotional conditions and document any change.

### **9637c: Pharmacology**

Subject Code: 072085

Students will apply the principles of pharmacology in order to read, interpret and dispense prescriptions. They will learn how medications are classified and administered. Students will study the impact of drugs on different systems of the body, interaction of drugs, side effects and effectiveness in relation to dosages.

### **9635a Patient Centered Care and Diagnostics**

Subject Code: 072055

In this course, students establish and implement treatment plans while providing primary nursing care. Topics include pharmacology, phlebotomy, mental health nursing and acute care nursing. Students use diagnostic techniques to develop patient health assessments. Emphasis is placed on the synthesis of information gathered through health history, observation, and the detection of

deviations and variations from normal physical characteristics. In addition, students learn the legal and ethical principles needed to function within the scope of practice.

### **9635b Lifespan Development and Medical Intervention**

Subject Code: 072060

Students gain necessary skills and knowledge to meet the needs of individuals from infancy through the human life cycle in a safe, legal, and ethical manner using the nursing process. Topics include physical, psychological, and cultural variations associated with maturing and aging. Emphasis will be placed on regulatory compliance, patient assessment, patient safety, and medical interventions. Additionally, students use psychomotor nursing skills to assist in day-to-day patient care activities.

### **9635c Medical Terminology**

Subject Code: 072150

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

### **9636a Principles of Allied Health**

Subject Code: 072035

In this first course students will apply knowledge and clinical skills necessary to assess, plan, provide, and evaluate care to patients in varied healthcare settings. Students will apply first aid principles and techniques needed for response to choking, cardiopulmonary resuscitation, and other life-threatening emergencies. Emphasis will be placed on regulatory compliance, patient safety, pathophysiology, and medical interventions. Additionally, this course introduces psychomotor skills needed to assist individuals in meeting basic human needs.

### **9636b Patient Centered Care**

Subject Code: 072050

Students will apply psychomotor nursing skills needed to assist individuals in meeting basic human needs. Students will implement interventions following a nursing assistant plan of care. Students will collect patient's vital signs including temperature, pulse rate, respiration rate, and blood pressure. Students will perform phlebotomy procedures with emphasis on infection prevention, universal precautions, proper patient identification, specimen acquisition, handling, and processing. Additionally, students will observe patients' physical, mental, and emotional conditions and document any change.

### **9637a Nutrition and Wellness**

Subject Code: 072015

Students will increase their knowledge of comprehensive health and wellness. Students will be able to identify the components of fitness and communicate the relationship between physical

fitness, physical performance, injury prevention, and nutritional intake. Students will evaluate an individual's state of nutrition based upon the impact of personal choices and social, scientific, psychological and environmental influences. Further, students will calculate an individual's kilocalorie burn rate and recommend an ideal diet and physical fitness plan.

### **9637b Medical Terminology**

Subject Code: 072150

This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

### **9695a Visual Design Primer**

Subject Code: 340310

Visual design takes the form of charts, drawing, boxes and more. In this first course for the Visual Design and Imaging pathway, students gain a perspective of symbols, typography and product output. They acquire basic knowledge of today's role of graphics in communication industries. Focusing on the consumer, students analyze products and create their own designs for critique. They learn how safety, deadlines, teamwork and ethics relate to the work.

### **9695b Advertising and Communication**

Subject Code: 340340

Creators and producers of graphic images must understand how to integrate and adapt creations for multiple marketing purposes. Students research and analyze the power of visuals in advertising campaigns and public relations events. Using the principles of advertising and visual communications, they develop strategies and products for specific purposes and audiences. They use logos, images and type integrated strategically to create both printed and electronic products on a theme.

**NONDISCRIMINATION POLICY:** The Willoughby-Eastlake City Schools comply with the Rules and Regulations as set forth in Title IX implementing the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973. Complaints from students will follow a three-step procedure: 1) grievance filed initially with the building administrator (or designee) with notification to the Title IX compliance officer, 2) review by the appropriate director, and 3) appeal to the compliance officer.

The following documents should be completed by each student with the support of parents/guardians and a guidance counselor. Each student is encouraged to complete these forms in pencil, as they are intended to be organic documents which grow or adjust as a student progresses through school. An electronic version of these documents is also available on the district website: [www.weschools.org](http://www.weschools.org)



STUDENT PLANNING DOCUMENTS



**My Four-Year Planning Guide**

Grade 9			
1 <sup>st</sup> Semester		2 <sup>nd</sup> Semester	
English		English	
Math		Math	
Science		Science	
Social Studies		Social Studies	
Computer		Computer	
PE		PE	
Elective		Elective	
Elective		Elective	
Elective		Elective	

**Total Credits Earned:** \_\_\_\_\_

<b>Grade 10</b>			
<b>1<sup>st</sup> Semester</b>		<b>2<sup>nd</sup> Semester</b>	
English		English	
Math		Math	
Science		Science	
Social Studies		Social Studies	
Computer		Computer	
PE		PE	
Health		Health	
Elective		Elective	
Elective		Elective	

**Total Credits Earned:** \_\_\_\_\_

**(Fall Administration) PSAT Scores:**

**Critical Reading:** \_\_\_\_\_

**Math:** \_\_\_\_\_

**Writing:** \_\_\_\_\_

Grade 11			
1 <sup>st</sup> Semester		2 <sup>nd</sup> Semester	
English		English	
Math		Math	
Science		Science	
Social Studies		Social Studies	
Computer		Computer	
PE		PE	
Health		Health	
Elective		Elective	
Elective		Elective	

**Total Credits Earned:** \_\_\_\_\_

**(Fall or Spring Administration Recommended) ACT Scores:**

**English:** \_\_\_\_\_ **Math:** \_\_\_\_\_ **Reading:** \_\_\_\_\_ **Science:** \_\_\_\_\_ **Writing:** \_\_\_\_\_ **Composite:** \_\_\_\_\_

**(Spring Administration Recommended) SAT Scores:**

**Critical Reading:** \_\_\_\_\_ **Writing:** \_\_\_\_\_ **Math:** \_\_\_\_\_ **Optional Subject Score(s):** \_\_\_\_\_

Grade 12			
1 <sup>st</sup> Semester		2 <sup>nd</sup> Semester	
English		English	
Math		Math	
Science		Science	
Social Studies		Social Studies	
Computer		Computer	
PE		PE	
Health		Health	
Elective		Elective	
Elective		Elective	

**Total Credits Earned:** \_\_\_\_\_

**Students are encouraged to refer to pages 5-6 for Graduation Requirements and page 9 for Eligibility Requirements.**

**(Fall Administration Recommended) ACT Scores:**

**English:** \_\_\_\_\_ **Math:** \_\_\_\_\_ **Reading:** \_\_\_\_\_ **Science:** \_\_\_\_\_ **Writing:** \_\_\_\_\_ **Composite:** \_\_\_\_\_

## Course Selection Overview

English				Science		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
301	English I	1.0		2302	Physical Science	1.0
310	English I Honors	1.0		2304	Current Issues & Trends in Science	0.5
401	English II	1.0		2401	Honors Biology	1.0
421	English II Honors	1.0		2403	General Biology	1.0
522	English III	1.0		2421	Environmental Science	1.0
531	English III Honors	1.0		2423	AP Environmental	1.0
532	AP Eng. Language	1.0		2500	Honors Chemistry	1.0
621	AP Eng. Literature	1.0		2507	General Chemistry	1.0
622	English IV	1.0		2600	Intro to STEM*	0.5
631	English IV Honors	1.0		2602	Physics	1.0
500	Speech/Oral Interp.	0.5		2603	STEM Drone*	0.5
502	Speech II	0.5		2621	AP Biology	1.0
503	Literature as Film	0.5		2631	AP Chemistry	1.0
504	Creative Writing	0.5		2641	AP Physics I	1.0
505	Contemporary Lit.	0.5		2605	AP Physics II	1.0
510	Publications	1.0		2642	Forensic Science*	0.5
511	Drama/Theater	0.5		2643	Astronomy*	0.5
512	Yearbook	1.0		2645	Honors Human Anatomy & Physiology	1.0
613	Writing for College I	0.5				
614	Writing for College II	0.5				

\*Denotes elective with a STEM Focus

Math				Social Studies		
Course Number	Course Title	Credits		Course Number	Course Title	Credits
3089	Algebra I Connections	0.5		1315	World History & Civilizations	1.0
3090	Algebra II Connections	0.5		1316	Honors World History & Civilizations	1.0
3091	Honors Geometry	1.0		1402	US History	1.0
3093	Algebra I	1.0		1403	Honors US History	1.0
3101	Honors Algebra II Trig	1.0		1502	Sociology	0.5
3103	Geometry	1.0		1503	Psychology	0.5
3123	Pre-Calculus	1.0		1504	AP Psychology	1.0
3111	Honors Pre-Calculus	1.0		1506	American Government	1.0
3124	Financial Algebra	1.0		1510	US Military: Past, Present & Future	1.0
3113	Algebra II	1.0		1540	Comparative Religion	1.0
3121	AP Calculus AB	1.0		1621	AP US Government & Politics	1.0
3122	Introduction to College Math	1.0		1624	Senior Seminar Post WWI	0.5

<b>Math</b>			<b>Social Studies</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
3125	AP Statistics	1.0	1625	Senior Seminar Modern Era	0.5
3126	AP Calculus BC	1.0	1727	Theory of Economics I	0.5
3128	Sports Statistics	0.5	1728	Theory of Economics II	0.5
			1622	European History	1.0
			1630	AP European History	1.0

<b>Business</b>			<b>Health and P.E.</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
5303	Personal Finance	0.5	8301	P.E. I	0.25
5500	Introduction to Business	0.5	8401	Health	0.5
5502	Accounting	1.0	5402	P.E. II	0.25
5503	Entrepreneurship	0.5	8602	Social Relations	0.5
5504	Business LAB/School Store	1.0	8603	Plyometrics & Conditioning	0.5
			8606	Lifeguarding	0.5

<b>Computer Education</b>			<b>Art</b>		
<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>	<b>Course Number</b>	<b>Course Title</b>	<b>Credits</b>
3900	Computer Science I*	0.5	7405	Art I	1.0
3901	Computer Science II*	0.5	7406	Art II	1.0
3902	Programming*	0.5	7502	Art III	1.0
3903	Multimedia Communications*	0.5	7602	Art IV	1.0
3904	HTML/Java Script*	0.5	7407	Ceramics I	0.5
3905	AP Computer Science		7507	Ceramics II	0.5
3907	Computer Aided Design 2D-3D*	0.5	7411/7413	Exploring Visual Art /Music	
3908	Media Productions*	1.0	7408	Graphic Design I	0.5
3999	Student Experience Through Design (South)*	1.0	7408B	Graphic Design II	0.5
2601	Robotics*	0.5	7409	AP Art History	1.0
2605	STEM DRONE*	0.5	7999	Student Experience Through Design (North)	1.0
2607	Digital Fabrication I*	0.5			
2608	Digital Fabrication II*	0.5			
2609	Digital Fabrication III*	0.5			

\*Denotes elective with a STEM Focus

Family Consumer Science			Art		
Course Number	Course Title	Credits	Course Number	Course Title	Credits
6402	Creative Cook	0.5	7401	Symphonic Band	1.0
6502	Food for Fitness	0.5	7403	Wind Symphony	1.0
6503	Teen & Adult Roles	0.5	7412	Mixed Choir	1.0
6506	Independent Living	0.5	7512	Concert Choir	1.0
6508	Child Development	0.5	7503	Music Theory	1.0
1300	Career Exploration	0.5			

World Language			General Electives		
Course Number	Course Title	Credits	Course Number	Course Title	Credits
4301	French I	1.0	800	ACT/SAT Prep	0.5
4401	French II	1.0	1001	Senior Mentoring (South)	0.5
4501	French III	1.0	1110	Academic Decathlon	1.0
4601	French IV Honors	1.0			
4701	French V Honors	1.0			
4304	Spanish I	1.0			
4404	Spanish II	1.0			
4504	Spanish III	1.0			
4604	Spanish IV Honors	1.0			
4704	Spanish V Honors	1.0			
4402	German II	1.0			
4502	German III	1.0			
4602	German IV	1.0			