KENMORE WEST HIGH SCHOOL

An International Baccalaureate World School

Mission Statement:
Kenmore West High School is committed to developing knowledgeable, principled, and compassionate young adults, through academic, personal, and occupational experiences, in preparation for an ever-changing global landscape.

2017-2018
Curriculum Handbook

33 Highland Parkway
Buffalo, New York 14223
(716) 874-8401
http://www.kenton.k12.ny.us

Kenmore West High School

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MISSION STATEMENT:

Kenmore West High School is committed to developing knowledgeable, principled, and compassionate young adults, through academic, personal, and occupational experiences, in preparation for an ever-changing global landscape.

Attitudes for Success: Growth mindset

Behaviors for Success: Respectful, Responsible, and Safe

Kenmore West High School

An International Baccalaureate World School

Learner Profile

As KW students we strive to be:

INQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS

We use critical and creative thinking skills to analyze and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

PRINCIPLED

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

BALANCED

We understand the importance of balancing different aspects of our lives - intellectual, physical, and emotional - to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

SCHOOL DIRECTORY

KENMORE WEST HIGH SCHOOL
33 Highland Parkway, Buffalo, New York 14223-1399
Phone: 716-874-8401 FAX: 716-874-8527

Administration

Mr. Dean Johnson..... Principal
Mr. Kevin Kruger. .....Operations Principal
Mr. Dan Charland. ..... Asst. Principal
Mrs. Christine Koch.....Asst. Principal

Counseling Center

Mr. Matthew Gourlay ..... A – De
Mrs. Kim Sedita ..... Di- Hr
Mrs. Tracy Serio ..... Hu - Men
Mr. Michael Panepinto.....Mer - Sci
Mrs. Amy Handley.....Se - Z
Ms. Betty Sullivan..... All 8th Grade
Mrs. Nadine Brown.....Social Worker
Ms. Tara Petrozzi.....Psychologist
Mrs. Kate Polly.....Psychologist

DISTRICT ADMINISTRATION

1500 Colvin Boulevard, Buffalo, New York 14223, 716-874-8400

Ms. Dawn Mirand..... .....Superintendent
Ms. Robin Zymroz.....Assist. Supt. Curriculum and Instruction
Ms. Margaret Puzio.....Interim Assist. Supt. Human Resources
Mr. John Brucato.....Assist. Supt. Finance
Dr. Michael Lewis.....Dir. of Student Services & Sp. Education
Mr. Frank Spagnolo.....Supervisor of Secondary Special Education
Ms. Brenda Chmura...Supervisor of Elementary Special Education

Board of Education (2015-2016)

1500 Colvin Boulevard, Buffalo, New York 14223, 716-874-8400

Mrs. Jill O'Malley ..... President
Mr. Andrew Gianni ..... Vice-President
Mrs. Christine Cavarello..... Trustee
Mr. Christopher Pashler..... Trustee
Dr. Thomas Reigstad ..... Trustee

The Kenmore-Town of Tonawanda Union Free School District hereby advises students, parents, employees, and the general public that it offers employment and educational opportunities, including vocational education opportunities, without regard to sex, race, color, age, national origin, or physical handicap. Grievance procedures are available to interested persons by contacting the Title IX Coordinator or Section 504 Coordinator through the Office of the Superintendent, 1500 Colvin Boulevard, Buffalo, New York 14223, (716) 874-8400.

INTRODUCTION & PROGRAMS

Kenmore West High School is one of two comprehensive high schools that serve the Village of Kenmore and the Town of Tonawanda in the Buffalo metropolitan area of Western New York. Ken-Ton is a suburban district serving 90,000 citizens and enrolls over 8,000 pupils from ethnically, socially and economically diverse neighborhoods. Kenmore West encompasses 98 classrooms, 9 computer labs, 3 gymnasiums, a library media center and 19 acres of athletic fields. Kenmore West High School is an authorized International Baccalaureate World School.

Kenmore West offers rigorous college and career preparatory programs and curricula in Science, Technology, Engineering, Arts and Mathematics (STEAM) Education, and the Humanities. Our school offers a dynamic student life with a comprehensive athletics program as well as clubs/activities, internships, and community and service opportunities.

Special Courses and Programs of Study

International Baccalaureate Diploma Program
Project Lead the Way Pre-Engineering Program
Advanced Placement
Computer Networking & Technology Academy
Information Technology Academy
Pre-Engineering Academy
Virtual Enterprise & Finance Academy
Media Arts Pathway
Internship Program

Graduation Requirements

Course	Regents	Adv. Regents
English	4	4
Social Studies	4	4
Mathematics	3 [b]	3 [b]
Science	3 [b]	3 [b]
Languages [a]	1	c
Health	0.5	0.5
Arts	1	1
Electives	3.5	4.5
Physical Education	2	2
Total	**22**	**22**

a. World Languages

b. A commencement level course (e.g., Principles of Engineering) in technology education may be substituted for the third unit of credit in science or math, but not both.

c. For an Advanced Regents diploma, students must complete one of the following: three units of a World Language, including the NYS Regents-approved exam, or 5 credits in an approved Career and Technical Education program, plus one credit in a World Language.

d. For the International Baccalaureate Diploma, students in grades 11-12 will complete two-year courses in English, social studies, World Languages, math, science, and electives; plus a course in Theory of Knowledge (ToK), an independent essay, and extracurricular activities.

All students must take physical education each year. Physical Education is a graded course that is included in a student's overall academic average and used to calculate a student's rank in the graduating class.

The following elective courses may be used to satisfy the arts requirement: Studio in Art, Design & Drawing for Production (D.D.P.), Theatre, Band (2 years), Orchestra, Wind Ensemble, Chorus (2 years), Choir, and Music in Our Lives.

Required Regents Exams

Regents Diploma	***Advanced Regents***
Mathematics	Mathematics
Integrated Algebra OR	Integrated Algebra AND
Geometry OR	Geometry AND
Algebra2/Trigonometry	Algebra 2/Trigonometry
English	English
Global History & Geography	Global History & Geography
U. S. History & Government	U.S. History & Government
Science (1 exam)	
(either Earth Science	Science (2 exams)
or Living Environment)	(1 Living Environment)
World Language A*	World Language B

* The requirement for World Language is that students must successfully complete two units of study and earn 1 high school credit in World Language before the end of 9th grade. This may be achieved by successfully completing 7th and 8th grade World Language and passing the locally-developed SLP exam. Students who fail to do so must pass a level A language course in ninth grade.

PROGRAM PLANNING

Thinking carefully about your academic program is critical for success in school. School counselors, faculty, and staff urge you to use all of the information available in setting up a schedule that will help you succeed both in school and after you graduate.
Counselors continually work with students on program planning. At the beginning of the second semester each year, parents and students begin the formal course selection process. Counselors will help students use the following information in making course requests:

Teacher Recommendations
Past Course Grades
Standardized Testing Scores
Post High School Plans
Graduation/Requirements
Individual Skills & Aptitudes

Each school year, students meet with their counselors to review this information and to select courses for the following year. Parents will be able to view these course requests using the Parent Portal.

Parents are urged to be a part of the course selection process! Call the Counseling & Career Center Office for an appointment.

The school cannot guarantee any student his or her choice of a specific teacher or class period for a course or for lunch. We are committed to providing everything necessary for students to complete requirements for graduation successfully; however, the size of the school and complexity of the schedule make honoring personal preferences impossible. We appreciate your understanding of this fact.

MINIMUM SCHEDULE & FULL-TIME STATUS

Public education is still an outstanding educational value: outside of school, programs of comparable quality are usually very expensive. Students are required to take advantage of the full range of academic and elective offerings the school has available by taking a full schedule of classes.
There are eight 40-minute academic periods available during the day for school programs. **All students must be enrolled in a minimum of six units of study plus physical education.**

*All students will be scheduled for lunch unless the student has permission to skip lunch in writing from his/her parent or guardian.

COURSE INFORMATION

It is the practice of Kenmore West High School to place students in the **most challenging academic program available** in which the student can be successful.

International Baccalaureate Diploma Program (IB)
As an authorized IB World School, Kenmore West offers the option of an International Baccalaureate Diploma. IB is a challenging, rigorous, academic program designed for motivated, college-bound juniors and seniors who want a full program of college-level courses. Students take two-year courses in the six traditional college preparatory areas, and courses meet every other day for a double period. In addition, IB students complete a self-directed program of extracurricular activities; an independent research project (with the help of a faculty supervisor), and a course in Theory of Knowledge. Assessments are administered or monitored externally by the International Baccalaureate Organization. Fees for IB examinations will be paid by the student—approximately $113.00 per exam—and will be due on October 15 of the senior year. Students will receive assessment fee information in August of senior year, and payment will be sent to:

Ken-Ton Schools
Business Office-IB Exams
1500 Colvin Blvd
Buffalo, NY 14223

College credits may be earned depending upon the results of the IB examinations and the policy of the college.
Many colleges give sophomore standing to students who complete the IB diploma with good grades. A link to the policies of all US colleges is found on the Kenmore West IB webpage under "University Recognition." Use the "IB" link on the KW homepage "Shortcuts" list.

Advanced Placement (AP) Courses

These are college level courses planned by the College Entrance Examination Board. They are designed for students who have the ability and motivation to perform at this demanding level. Students enrolled are required to take the local or Regents final examination in June and the Advanced Placement examination in May. Fees for Advanced Placement examinations will be paid by the student. The cost for 2016-2017 AP Exams has not yet been determined but it is estimated to be $90.00 per exam. Fees will be **due by early January.**
Please **make check payable to the Ken-Ton School District**. If your student is enrolled in more than one AP course, you do not need to write more than one check. If mailing your payment, please send to:

Ken-Ton Schools
Business Office-AP Exams
1500 Colvin Blvd
Buffalo, NY 14223

You may also pay in cash to the business office at the Administration Building from 8:00 – 4:30 daily.

College credits may be earned depending upon the results of these examinations and the policy of the college. Juniors and seniors are urged to contact the admissions offices at their top choice colleges to learn more about AP grades.

Honors and Regents Courses

These courses follow a state syllabus and carry Regents credit if the Regents exam is passed with a grade of at least 65% and the student earns a "final grade" of at least 65%. Regents courses are taught at the college preparatory level.

Honors classes contain additional content at greater depth than do Regents courses. Honors courses are designed for students with above average ability and motivation to excel. Most honors courses have strict prerequisites for enrolling. **No student will be placed in honor classes if they do not meet the criteria.**

9th Grade Honors Classes

Students will be considered for Honors courses in Math, Science, Social Studies, or English only if a final average of "A-" has been earned in 8th grade, and the student scores at Level 3 or 4 on the NYS Assessments.

Dropping and Adding Courses

Many factors are considered when a master schedule for over 1400 students is designed. Because of the complications to scheduling and the important decisions predicated on the schedule, changes may not be considered after July 1st.

Repeating a Course or Exam

Students who fail a course are strongly encouraged to repeat the course in summer school to avoid an extra year of high school. Students who would like to retake a course or exam to raise their grade may do so by making arrangements with their counselor. Students may retake Regents or Proficiency exams in January, June, and August each year depending on availability (not all exams are available in January and August). Students who wish to retake a course in summer school must complete the course during the school year in order to be eligible for summer school.

Cancellation of Courses

Courses are sometimes cancelled over the summer due to low enrollment or unexpected staff changes during the scheduling process. Students who cannot take a course for this reason will have an alternative course or study hall added to their schedule.

Academic Intervention Services

Students who fail a Regents exam required for graduation are scheduled for mandatory extra help classes. These are held during the school day.

Ninth graders who score at Level 1 or Low Level 2 on the eighth grade state assessments will also be assigned to receive extra help.

These classes are mandated New York State Law and are not optional or voluntary.

EXAMS AND GRADING

Advanced Placement (AP) Exams

These college-level tests are administered in May to students enrolled in Advanced Placement courses. The student pays the examination fee for the Advanced Placement courses. The school supplies complete information to all students who wish to take these examinations, and they are administered during the school day. Test results generally come back to the school by August 1. Depending on the respective college policy, students may receive college credit based on the results of these examinations. AP exams are graded on a 5-point scale.

International Baccalaureate (IB) Exams and Assessments

IB assessments are administered throughout the two-year courses, and most IB courses include formal examinations in May of the senior year. The student pays the examination/assessment fees for IB courses. Exam and diploma results are returned to the school by the International Baccalaureate Organization in July, after graduation. Depending on college policies, students may receive up to a full year of college credit for the full diploma if earned, or for individual IB courses. IB examinations are graded on a 7-point scale.

Regents and Local Examinations

Students enrolled in Honors and Regents level classes take Regents examinations when offered. These tests are prepared by the State Department of Education. A local examination is offered when a Regents examination is not available.

Course Grades
Numeric (number) grades will be used in all credit-bearing courses.

Grading Scale	Honor Roll
A = 90-100	92.5-100 High
B = 80 - 89	87.5-92.4 Honor
C = 70 - 79	82.5-87.4 Merit
D = 65 - 69	
F = 0 - 64	

Incomplete ("I") Grades

a. An "Incomplete" grade (shown as "I" on the Progress Report) may be given when a student has an illness, absence for extenuating circumstances, or a very unusual situation that prevented the student from completing assignments when due. The grade of "Incomplete" is given when there is a reasonable expectation that the work can be made up.

b. Students have two weeks to make up work from an "incomplete" grade.

c. An "Incomplete" will be converted to a failing grade where requirements are not met within the time limits described in the previous paragraph. An "Incomplete" will not be used in the last quarter of a course.

Final Grade

a. The "Final Grade" is determined from an average of a student's four quarterly class grades with the final examination grade, using the ratio of 1/5 for quarter grades and 1/5 for the final examination.

b. The "Final Grade" determines whether a pupil passes or fails a course and is eligible for course credit. Sixty-five percent (65%) is the minimum passing grade.

Report Cards

Reports to parents are mailed home directly at the end of each ten-week marking period. Special Interim Progress Reports will be sent at 15, 25, and 35 weeks. Report cards and transcripts are available for viewing through the Parent Portal on our web site.

Class Placement Average and Rank in Class

The Class Placement Average is usually computed by November 1 of the senior year. The "Class Average" (average of course quarterly grades, excluding the final exam grade) for each course will be weighted according to the values listed below to produce the "Weighted Class Average." Four-fifths of the Weighted Class Average will be added to one-fifth of the Final Exam to produce a "Weighted Final Grade." All the Weighted Final Grades for courses (except P/F grades) in 9th, 10th, and 11th grade and summer school Average." ***These scores are only used in computing senior class placement.*** Upon a request from a college, updated information will be submitted in the form of the most recently available report card. College level courses taken as an extension of the high school program, e.g., Gifted Math Program at SUNY Buffalo, will be weighted the same as comparable courses offered at Kenmore West.

The rank in class is established by placing students in descending order from highest to lowest according to their Class Placement Average. Students are placed by percentile and notified personally of their rank in class. Actual numeric rank in class is not announced publicly, but is recorded along with Class Placement Average on individual permanent records.

Course Weighting Scale

Code	Designation	Weighting
AP	AP	1.10
IB	IB	1.10
H	Honors	1.05
R	Regents	1.00

will be arithmetically averaged to produce the "Class Placement".

Rank and Class Averages of Transfer Students

Courses determined to be of a difficulty level equivalent to those offered at Kenmore West as determined by the principal or his/her designee will be weighted according to the above scale. Weighting will take place only if the previous school has provided an *unweighted* final course average and final examination grade. Decisions will be made on an individual basis for each transfer student with the information available from the student's previous school.
Note: Weighting of grades does appear on report cards

Driver Education Credit

1/2 credit will be allowed for Driver Education courses given by another New York State certified agency, but the grade will not be used in calculating class placement. Official grade reports must be submitted to the counseling office in order to ensure credit is applied.

REGISTRATION OF NEW STUDENTS

Parents new to the district must register their student(s) for school by appointment at the Central Registration Office, located at the Administration Building at 1500 Colvin Blvd. Parents must bring a copy of the student's birth certificate, two (2) proofs of residency in the Ken-Ton School District, immunization records signed by the student's doctor, and a physical dated within one year of the start of the new school year. The student's most recent report card is also necessary for program planning. There is a new dental requirement for all 10th graders and new entrants per New York State. Forms will be available in the Health Office. Parents MAY NOT register any student without all appropriate documentation. Parents are required to make an appointment by calling 871-2091.

KENMORE WEST LIBRARY

The Kenmore West Library is an interactive, collaborative learning space where students access, gather, evaluate and use resources to affect their own learning to become college and career ready.

Our library serves as a vital asset to students and staff through its print and digital resources. Librarians, teachers, and the library staff work together to provide research skills, information analysis, ac-

cess to technology and reading motivation to all students. Instruction focuses on developing research strategies and a lifelong love of reading and learning.

The Kenmore West Library and its program impact the total curriculum of our school. Our program is designed to provide resources in all formats to meet the diverse informational and instructional needs of all students. The librarians support student learning by planning instruction with teachers to support and enrich the curriculum and by creating and maintaining an atmosphere in which students can learn and are expected to be respectful, responsible and productive.

Our library website offers 24/7 access to subscription databases, the library catalog and other resources containing full-text articles, newspaper, and magazine sources, video and audio selections, and image galleries. Passwords are sent electronically to student email accounts and are available in paper format in the library.

The physical library is open daily before school at 7:30 a.m. and after school Monday through Thursday until 3:30 p.m. In addition to scheduled, collaboratively taught classes students may also use the library during study hall and lunches. We encourage students to visit the library and ask questions so they can fully utilize all of our resources.

OTHER INFORMATION

Participation in Commencement

Participation in the graduation ceremony will be determined after evaluation of course completion and credit. Students who have not met all of the requirements for graduation will not be allowed to participate in Commencement.
The student must be a *bona fide* senior in September. A *bona fide* senior is a fourth year student who can complete graduation requirements by June 30 of the graduation year.

Career Center

The Career Center is located in the Counseling Office and is open from 7:45 am to 3:15 pm daily. Students may use the Career Center to find information on occupations and post high school training programs. Individual occupational interest surveys are available and a computer terminal in the Center may be used to obtain college and occupational information. Career programs related to student interests are periodically scheduled. Students may sign up for Job Shadowing experiences through the Career Center.

Summer School

The Kenmore-Town of Tonawanda Public Schools may offer summer sessions for high school students at the discretion of the Board of Education. Summer School may offer courses in repeat or new work. A schedule of courses is published each May. Courses will be offered when there is a sufficient need to warrant offering them. Ten percent of a student's final course grade is included in the final summer school grade. The highest final grade for a course will be used to calculate the class average.

Challenging an Exam

Permission to retake a final or Regents examination without enrolling in the course either during summer school or during a January or June exam period is subject to the approval of the principal. The decision of the principal will be based on the demonstration of student proficiency in the course. The standard for demonstrating student proficiency is a class average of 80% or above and a final exam grade of 60% or above. (Extenuating circumstances contributing to a poor final examination grade may also be a consideration.) Permission from the principal should be obtained before summer school. Failure to do so may result in the unavailability of specific examinations.

Objection to Materials or Content

Parents who object to books, materials, or instructional content on moral, ethical, or religious grounds and wish to have their student excused from such instruction should submit a request in writing to the building principal. Students may be excused on a temporary basis, and will be assigned equivalent, alternative work for their grade.

Athletic Eligibility

The following are provisions of the General By-Laws of the Niagara Frontier High School Athletic League, Inc., that determine the eligibility of our athletes. (All Kenmore West students must carry a minimum of five (5) subjects and physical education although the league requires four (4) subjects.

A. A student must be a *bona fide* pupil of the high school which he/she represents; he/she must be carrying at least five subjects and physical education. To participate in approved Niagara Frontier League Interscholastic Athletics from
   September through August of the school year, the students must have passed four units of work and physical education at the end of the last school year (September through August of regular enrollment).
   A student may establish eligibility for the second semester for the remaining winter and spring sports by being enrolled in and by meeting the minimum passing grade in four subjects and physical education at the end of the first semester.

B. To maintain eligibility for the second semester including the remaining portion of the winter season and the spring sport season, you must have passing grades in four (4) subjects and physical education at the end of the first semester of the school year.

C. If a student is declared ineligible, he/she may appeal the status at the ten-week and/or thirty-week marking period. The appeal must be initiated by the student in conjunction with the principal.

Academic Learning Center

The Learning Center is open from 8:00 am to 3:30 pm daily. Students are encouraged to use the Learning Center when they need assistance with any academic subject or project; remediation for course difficulties or to take a test if they require testing accommodations. Students can attend voluntarily from their study hall or lunch or be assigned to the Learning Center through their counselor

or Assistant Principal. Teachers and peer tutors are available to help.

USE OF SCHOOL COMPUTERS

Ken-Ton district students are required to sign the following agreement prior to being issued access to school computers. Violation of this agreement will result in suspension or revocation of the privilege.
The Ken-Ton School District provides access to various computerized information resources throughout Kenmore West for student use. These include access to electronic mail ("E-Mail") and the Internet. Students and parents will be required to agree and sign this policy prior to receiving a User Name and Password for the system. Violations will result in temporary or permanent loss of computer privileges.

1. Access to computer networks makes information available to students that are not controlled by the school district. Students are supervised at all times while in computer labs and the library, but it is impossible for the school to screen or review all of the information students may access.

2. The same standards for student behavior that apply to other student activities will also apply to the use of district computer resources. Students who engage in unacceptable use are subject to school discipline, including losing access privileges to school computers.

3. All student data files will be treated like school lockers; they remain the property of the Ken-Ton Schools. School administrators may look at student folders, data files, and e-mail messages at any time.

4. Students are not permitted to use school computers without a user name and password on record with the school.

5. In order to obtain a user name and password, each student is required to read and sign a copy of this Acceptable Use Policy.

Examples of behaviors for which students will be disciplined or lose access to school computers are, among others:

- Altering system software or placing unapproved software or files (e.g., viruses) anywhere on the school's network.
- Using the user name or password of another person.
- Using school computers to obtain, view, download, send, print, or display unlawful, obscene, pornographic or abusive materials.
- Using school computers to harass, insult, or attack others.
- Tampering with terminals, hardware, wiring, or other equipment.
- Changing, copying, renaming, deleting or reading files created by another person without permission of a teacher.
- Using school computers for personal or business reasons.
- Violation of copyright laws.
- Any other action that threatens the functioning or security of the school's computer network

ACADEMIES

Academy participants prepare for a wide-variety of career paths as they complete select programs of study. Additionally, successful program completers will benefit from earned college credit and an additional New York State-approved Career & Technical Education (CTE) diploma endorsement verifying each student's high level of achievement and career preparation.

All Academies are New York State Education Department approved Career & Technical Education (CTE) programs. In addition to receiving a CTE diploma endorsement, CTE program participants benefit from the ability to earn integrated high school credit, meet particular graduation requirements though alternative means, and will participate in a variety of internships or other forms of career exploration.

Career & Technical Education program participants have the opportunity to earn mathematics, science, art, and World Language (foreign language) credit through Academy courses and program sequences. Additionally, Academy participants may earn a Regents or Advanced Regents diploma while meeting CTE program requirements. See separate Academy publications or your counselor for specifics related to graduation requirements.

The following Academies are available to all incoming freshman and current high school students that qualify:

- Computer Networking & Technology Academy
- Information Technology Academy
- Pre-Engineering Academy
- Virtual Enterprise/Finance Academy

For more information: **www.ktufsd.org/academies.**

Computer Networking & Technology Academy

Students interested in computer hardware and software, computer networking, and technology in general will benefit from the Computer Networking & Technology Academy. Learning takes place through hands-on instruction in the District's state-of-the-art Technology Education labs. Topics covered include *Cisco* networking, digital electronics, automation, robotics, three-dimensional modeling, and rapid prototyping. Students who complete the program

have the opportunity to earn *Cisco Computer Networking Associate (CCNA)* certification.

Computer Networking & Technology Academy participants will enroll in the following courses while completing all graduation requirements:

PLTW Introduction to Engineering Design/DDP
Computer Networking 1 & 2
PLTW Computer Integrated Manufacturing
PLTW Digital Electronics
PLTW Computer Science & Engineering

See *Technology Education* section for all course descriptions

Information Technology Academy

Our rapidly evolving world relies heavily on the collection and distribution of digital information. From education to business to the consumer market, our society depends on our ability to access a wide variety of data. The Information Technology Academy will prepare students for future careers in the IT industry. Students who complete the program may choose to continue training with enrollment in two or four-year colleges or may go directly to entry-level careers in a wide variety of fields.

The course of study for Information Technology students includes:

PLTW Introduction to Engineering Design/DDP
Computers and the Internet
Computer Networking 1 & 2
Web Design 1 & 2
Computer Fundamentals
Financial Literacy

See the *Business Education* and *Technology Education* sections for course descriptions.

Pre-Engineering Academy

The Pre-Engineering Academy includes the Project Lead the way (PLTW) Pathway to Engineering Program. This program is a hands-on and project-based sequence of study that engages students in a real-world learning environment. Students explore science, technology, engineering, and mathematics (STEMs) in a unique, nontraditional manner that allows students to not only see concepts on paper, but learn through experience and experimentation. Exciting experiences include: automation, robotics, rapid prototyping, three-dimensional modeling, materials testing, electronics, and architectural design. The Pre-Engineering Academy sequence of courses concludes with a capstone design project that allows students the opportunity to work with educators and representatives of industry to design, build, and market a unique invention exhibiting learning that took place in this program.

Pre-Engineering Academy participants will complete the following courses with electives while completing all high school graduation requirements:

PLTW Introduction to Engineering Design/DDP
PLTW Computer Integrated Manufacturing
PLTW Principles of Engineering
PLTW Digital Electronics
PLTW Engineering Design & Development
Architecture ***or***
PLTW Computer Science & Software Engineering

See *Technology Education* section for course descriptions.

Virtual Enterprise & Finance Academy

The mission of the Virtual Enterprise & Finance Academy is to provide students with a challenging, student-centered, project-based academic, business/financial and technology program. Students will be exposed to the global business world and will be inspired to become respectful and successful members of a continually evolving financial community. Students will participate in mentoring, job shadowing, community service and paid internships.

Students who participate in this career-preparation academy will be developing and learning the skills necessary to be successful in today's financial world. This program focuses on preparing students for a variety of careers that are (or will) be available to high school and college graduates in the coming years. The Virtual Enterprise & Finance Academy includes the following courses:

Computers and the Internet
Web Design 1 & 2
Virtual Enterprise
Business Law
Financial Literacy
Accounting 1
Internship

See the *Business Education* section for course descriptions.

Academy Requirements

Academy enrollment is open to all incoming high school freshman. Additionally, current high school students may also enroll provided they have the time and opportunity to meet all specific Academy course requirements.

To earn the NYS CTE diploma endorsement, Academy participants must:

- Be motivated to pursue career preparation in one of the available programs.
- Complete all courses in the prescribed program of study.
- Meet all graduation requirements including earning at least the minimum number of units of credits.
- Participate in a variety of work-based learning opportunities.
- Complete an employability profile.
- Pass an industry standard assessment.

Work-Based Learning Course at KW - pathway to a CDOS certificate

Career Development and Occupational Studies (CDOS) is designed for students with disabilities who may not be able to earn a Local or Regents Diploma in the same year as other students in their cohort. Students who may not graduate with a local to Regents diploma are required by NYS law, to work towards the certificate. This certificate will be shown to employers, to let them know, students are prepared and ready to work in the real world. Job readiness skills developed in this course, and students are often given an opportunity to participate in an internship while taking the class.

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM

The International Baccalaureate Diploma Program (IBDP) is a challenging two-year curriculum for academically motivated college-bound students in the junior and senior year of high school. It leads to a special diploma from the International Baccalaureate Organization in addition to the student's New York State diploma, or to certificates in individual IB subjects.

The curriculum combines rigorous academics with extracurricular activities in sports, the arts, and community service. It can open opportunities for college credit and advanced placement, scholarships, and acceptance in highly selective colleges and universities.

For more information about the IBDP, see the individual IB course descriptions in the following department listings, and visit the KW IB webpage under "IB" on the "Shortcuts" list on the Kenmore West homepage.

ART

COURSE OVERVIEW

Course	Credit	Length	Exam
Studio in Art	1 unit	40 weeks	local
Multi-media Studio	1 unit	40 weeks	local
Studio in 3 Dimensional Art	1/2 unit	20 weeks	local
Drawing & Painting	unit	40 weeks	local
Drawing & Painting for animation	1 unit	40 weeks	local
Photography 1	1/2 unit	20 weeks	local
Photography 2	1/2 unit	20 weeks	local
Advanced Multimedia Art	1 unit	40 weeks	local
Advertising Design	1 unit	40 weeks	local
Animation and Illustration	1 unit	40 weeks	local
AP Art 2-D or drawing	1 unit	40 weeks	Portfolio
AP Art History	1 Unit	40 weeks	AP exam
IB Visual Arts	2 Units	80 weeks	IB exam

If you have found enjoyment in your exploratory art classes and have an interest in developing and improving your skills, there are more courses in art available to you at Kenmore West. There is a five-course sequence for those who wish an art major. There are a number of additional courses for students interested in only one or two specific art-related areas. We encourage all students to consider these opportunities when planning their programs. The student considering an art major after high school or a professional career should follow this sequence:
1. Studio in Art
2. Drawing & Painting 1-2, and
3. One or more advanced electives.

Some advanced electives may be offered in alternate years depending on registration. Studio in Art may be used to meet the one unit of Fine Arts credit required for graduation.

COURSE DESCRIPTIONS

Studio in Art
This is a foundation course dealing with a thematic approach that is comprehensive and covers history, aesthetics, criticism and the production of art. A sampling of all media, 2- dimensional and 3-dimensional are offered. Students not only create works but also have the opportunity to reflect orally and in writing about the nature and content of their art.
Prerequisite: None
40 Weeks
1 unit
Exam: Local

Multimedia Studio in Art
Learn the basics of digital imaging, animation, filmmaking and interactive media! Studio Multimedia is an introductory art course that is focused on the use of the computer and digital media as an art form. The course can be used as the required art credit for graduation, as well as, the first course in the Media Arts Career Pathway. Students will develop a high level of skill with programs like: Adobe Photoshop, Adobe Illustrator, Adobe Flash, iMovie and Mudbox. Students who like computers and interactive media are ideal candidates for this course.
Prerequisites: None
40 Weeks
1 Unit
Exam: ½ Written, ½ Performance
1 Unit
Exam: Local

Studio in 3 Dimensional Art
This course serves as an introduction to three-dimensional artwork. The course is ideal for the art student interested in diversifying his or her background in the arts, as well as, the student who has an interest in three-dimensional artwork as a profession. The class will focus on sculpture, ceramics or crafts, depending on the needs and desires of the students. This course can be taken for credit more than once.
Prerequisite: None
20 Weeks
½ Unit
Exam: Local

Drawing & Painting
This intermediate art course appeals to students who are interested in improving their art skills, who enjoy working in a variety of media, and who are motivated in building either a personal portfolio or a college-ready portfolio showcasing their work. The curriculum includes representational drawing, drawing from life, abstract representations, non-representational art, and art work based on visual storytelling. Artwork will be developed from idea to finished product based on a variety of themes, subject matter, historic and contemporary influences, and approaches to visual problem solving. No matter what a student's current skill level is, he or she will be able to improve in their art making abilities. Both traditional media (pencils, charcoal, paint) and digital (computer generated) media are explored in this course. Although drawing and painting is most often associated with Fine Arts, 3D Animators,

game designers, and special effect artists require a well-developed sense of drawing ability. For this reason, the curricula has recently been expanded to better align our Fine Arts and Media Arts pathways to these growing art fields.
Prerequisite: none
40 Weeks
1 Unit
Exam: Local

Advanced Studio in Art

This course is offered as the culmination of the art student's high-school career. The course is intended for the serious art student who wishes to study art in college or pursue a career in the arts. The program is driven by the New York State Learning Standards with an emphasis on portfolio development. Goals of the course include: development of a personal style, creating conceptual art works, promoting professional development, and in-depth exploration of a wide range of materials. Students entering this course should be motivated by and dedicated to the arts.
Prerequisite: Studio in Art, Drawing & Painting 1 & 2 Portfolio, & Teacher Reference
40 Weeks
1 Unit
Exam: Local

Studio in Photography 1

This is an introductory art elective for students who wish to explore the use of the camera. The course emphasis will include use of the camera, film processing, printing the negative, digital applications and presentation of the photograph. The course will be divided between photo assignments and lab work. Students must have access to a 35 mm camera and purchase from their own funds, assorted photographic supplies.
Prerequisite: None
20 Weeks
½ Unit
Special Materials – Students must provide their own camera, film, and photographic paper.
Exam: Local

Studio in Photography 2

The major objective of Studio in Photography is to expose the students to advanced techniques used in black and white photography along with historical styles that allow students to develop their style as a final project. There will be critiques and written assignments as part of the comprehensive span of this course. Approximately 1/2 of this course will explore digital technologies and their uses in the contemporary photography world.
Prerequisite: Studio in Photography 1 (R)
20 Weeks
½ Unit
Special Materials – Students must provide their own camera, film, and photographic paper.
Exam: Local

AP Art (2-D or Drawing)

This course is designed for the professionally minded student who plans on majoring in art at the college level. This course is extremely intensive and requires the submission of a portfolio of 24 high quality works to the College Board for successful completion. Upon the successful completion of this course the student may be eligible to earn college credit in two-dimensional design or drawing. Prospective AP students must submit a portfolio and a written proposal at the end of the junior year to the art department for approval.
Prerequisite: Studio in Art, Drawing & Painting, Designated as a 5-unit art major
40 Weeks
1 Unit
Exam: AP

AP Art History

This course is designed to provide the same benefits to our students as those provided by an introductory college course in Art History. Students will gain an understanding and knowledge of architecture, sculpture, drawing and painting, and other art forms within diverse cultural and historic contexts. In this course, students will examine major forms of artistic expression from the past and the present, as well as from a variety of cultures. We will learn to look at works critically, intelligently, analytically, and with sensitivity to their context. Some guiding questions throughout history include the following: What roles have the arts played in various cultures at various times? How do the arts increase our understanding of history? How does art shape and document a culture? Grading for this course will be based on class discussions, student presentations, written assignments, and unit tests. The College Board will assess the Final Exam given in May.

Prerequisites: Final Averages in English and Social Studies (10th and/or 11th) above 85%.
Strength in: reading, writing, interpretation, and analysis.
Grade Level: 10-12
Weeks: 40
1 Unit
Exam AP

IB Visual Arts (grade 11 and 12)

(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Visual Arts is a Group 6 option for the International Baccalaureate Diploma Program. This is a two-year college level studio class that unites basic courses taught in college visual art foundation programs. It encourages awareness of the student's cultural heritage, experimentation, risk-taking, personal growth, and the development of one concentration area into several more directions. This class explores different techniques and media together, but the most important ingredient is the student. A deep commitment beyond the classroom is needed in order for the student to grow technically, creatively, and aesthetically.
Prerequisite: Studio in Art or Multimedia Studio in Art; IB students only IB assessments.

PRESS START!

Imagine a career in digital media, commercial art, graphic design, interactive design, gaming, or the entertainment arts (film, special effects). The Art Department strives to make this vision a reality by preparing students for college and career through the focused sequence of courses in our new Media Arts Pathway. The Media Arts Pathway features project based learning that develops skills needed in the professions mentioned above. Students will master a wide range of professional caliber applications including: Adobe Photoshop, Adobe Illustrator, Adobe In Design, Adobe Flash and Autodesk Maya. The student will have multiple opportunities to achieve professional certification through the completion of industry standard assessments. Students will also develop expertise critical 21st century skills including: professional communication, project management, maintaining professional standards and collaboration. The mastery of these skills will provide a distinguished status regardless of a student's chosen profession. Completion of the Media Arts Pathway will prepare students for entry level positions in a variety of fields, or serve as a solid foundation for advanced study at the college level.

A significant benefit provided through our Media Arts Pathway is the opportunity for students to receive ACA certification. (Adobe Certified Associate).

The Media Art Pathway is aligned with ACA certification (Adobe Certified Associate) *to provide students with the following advantages:

1. Students will graduate with an advanced level of design and technical skill using industry standard tools and software.
2. Students will gain specific skill sets needed in college and the workforce (not only in the arts, but in a variety of disciplines/careers dependent upon strong communication skills).
3. Students will obtain an industry and academically recognized ACA certification.
4. Students will get a head start by obtaining the tools, skills and confidence to make their career goals a reality.

**Adobe Certified Associate assessments and certifications will be provided in Adobe Photoshop and in Adobe Illustrator, Adobe InDesign, and Autodesk Maya TBA.*

How do I Start?

Students who are interested in pursuing the Media Art Pathway should first enroll in the foundation course Multimedia Studio in Art or Studio in Art. Upperclassmen should enroll in Advanced Multimedia. Teachers of these courses will connect students to our Media Arts Pathway Advisor who will personally guide them through which courses to take and how each course aligns to the ACA assessments*.

Pathway Sequence

The course list below describes the Media Arts Pathway suggested sequence:

- **Multimedia Studio** in Art or Studio in Art (ACA Photoshop) (see description above)
- **Photo 1** (see description above)
- **Drawing and Painting for Animation**
- **Advanced Multimedia** (ACA Photoshop)
- **Animation and Illustration** (Maya accreditation)
- **Advertising Design** (ACA Visual Communication)

Advanced Multimedia

This course introduces digital media as a vehicle for artistic expression and professional application. Students will acquire an advanced skill base in the digital arts, that will prepare them for artistic communication and expression in the 21st century. Students will be able to learn conceptual and technical skills needed to produce: graphic design, digital photography, computer animation, 3-dimensional digital modeling and video. Students will use computer digital applications including: Adobe Illustrator, Adobe Photoshop, Adobe After Effects, iMovie, Flash, Autodesk Mudbox, Autodesk Maya, and more. The production of film and video, it's editing and use of special effects will be a major focus of this course. Students will have the opportunity to achieve a variety of professional certification through this course.

Prerequisites: None
40 Weeks
1 Unit
Exam: Local, ACA Certification

Advertising Design

Advertising/Communication Design is a project-based course designed to develop career, communication, and visual problem solving skills for use in advertising, communication, and graphic design. Students will learn communication and collaboration, research and information fluency, digital citizenship, creativity and innovation, as well as technology operations and concepts. Critical thinking and problem solving will be demonstrated in both exploratory and real-life projects. Students will participate in individual and collaborative activities incorporating type, illustration, and photography in logos, business cards, advertisements, CD covers, brochures, and more. A portfolio will be developed for college and professional use. Students will learn Adobe Photoshop, Illustrator and InDesign, with the goal of attaining the Adobe Print Specialist Certification.

Prerequisites: None
40 Weeks
1 Unit
Exam: Local

Animation and Illustration

Students will explore fundamental techniques to create illustrations and animation with a focus on 2D and 3D digital animation. Students will work with the same programs as experts in the field including: Adobe Flash, Adobe Photoshop, Autodesk Maya, Mudbox, and more. Mudbox enables you to construct 3D digital models and create characters, objects, cars, and more. Maya allows you to make 3-D animations and CGI (computer generated imagery) come to life, just like in the movies! Students will have the opportunity to receive professional certification in Maya (the industry-based animation software).

Prerequisites: None
40 Weeks
1 Unit
Exam: Local, ACA Certification

Drawing and Painting for Animation

This course is designed for digital artists and designers in pursuit of advancing their drawing and painting skills, in both traditional (pencils, charcoal, paint) and digital (computer generated) media. 3D

Animators, game designers, and special effect artists require a well-developed sense of drawing skill. Students will learn: 3d rendering, lighting, colors, values, edges, and composition and how it applies to digital art and animation. No matter what your current skill level is, you will be able to improve in your drawing ability. In this project-based course, students will do observational drawing, painting, as well as digital drawing and painting using Photoshop. Artwork will be developed from idea to finished product based on a variety of themes, subject matter, and approaches to visual problem solving. This course is highly recommended for those students considering: computer animation, art, design, graphic/advertising design, or multimedia at the college level.
Prerequisites: Photoshop skills recommended
40 Weeks
1 Unit
Exam: Local

Business/Marketing and Computers

The Business/Marketing and Computers Department offers a variety of courses for the student in search of valuable life skills. Whether you are seeking higher education or direct placement in the world of work, we have the courses for you.

We are dedicated to continual development of our curriculum in order to stay on top of the ever-changing world of business and computers.

Our department offers classes that can earn students high school credits toward math (Business Math, Accounting). Other courses of ours will teach you valuable skills while making your résumé look great (Keyboarding, Microsoft Office, Internship, and Web Page Design).

Our goal is for *every* student to realize their potential while enjoying the courses we offer. We want to help you make the best investment for your future. Take a look at how we can!

<u>Classes for College Credit</u>
ECC: Accounting 1, Business Math, Personal Finance, Keyboarding, Computers & the Internet, Microsoft Office
Buffalo State: Computer Fundamentals, Web Design 1 & 2, Business Ownership

<u>Third Year Math</u>
Business Math may be used as a third year of Mathematics. (Students need to pass a minimum of two Mathematics classes and pass one Mathematics Regents Examination in order to be eligible for Business Mathematics to be applied as the third year Mathematics option.)
Accounting may be used as a third year of Mathematics. (Students need to pass a minimum of two Mathematics classes and pass one Mathematics Regents Examination in order to be eligible for Accounting to be applied as the third year Mathematics option.)

<u>Regents "Advanced Designation" Diploma</u>
5 credits in Business/Marketing and Computers Education may be taken instead of the foreign language requirement.

Business/Marketing and Computers Courses Offered

Accounting 1
Grades: Open to grades 10, 11, 12
*****Eligible for transferrable Advanced Studies Credit through ECC*****
Required for Virtual Enterprise and Finance Academy students
40 weeks/5 meetings per week - 1 Unit
Exam: Local

*****Course may be taken as an elective or a 3rd unit of Math (**Students need to pass a minimum of two Mathematics classes and pass one Mathematics Regents Examination in order to be eligible for Accounting to be applied as the third year Mathematics option.

Accounting is often said to be the "language of business." Students will learn the skills necessary to recognize and utilize accounting information and analyze financial data. Demand for Accountants is extremely high in today's job market! This course is a must for students majoring in Accounting, Business Ownership, Finance, Management and/or Marketing. Course is also said to be useful for those who want to study engineering. Students will find themselves a semester ahead of other students who did not take this course in high school!

The General Journal, Special Journals, Service & Merchandising Businesses will be explored. Topics may also include:

- Checking Accounts & Bank Reconciliations
- Payroll Records, Payroll Taxes, Basic Tax Returns & Investments
- Accounting Careers, Accounting Ethics & Internal Auditing Procedures
- Computer Accounting Software & Spreadsheets
- Fieldtrips & Guest Speakers

Advanced Accounting
Grades: Open to grades 11, 12
Prerequisite: Accounting 1
40 weeks/5 meetings per week-1 unit
Exam: Local

Have a knack for numbers? Did you do well in Accounting or want more preparation for your college business courses in Accounting? Then consider Advanced Accounting!

This course is offered as an extension of the Accounting 1 course. Projects/assignments involving more advanced accounting techniques and current events will be explored.
Some of the main topics include:

- Review of the basic accounting cycle
- Payroll Records, Payroll Taxes, Basic Tax Returns & Investments
- Accounting for Partnerships & Corporations
- Depreciation & Inventory Methods
- Uncollectible Accounts & Business Discount Methods

- Accounting Careers, Internal Auditing Procedures, Ethics & Scandals
- Automated Accounting Systems
- Fieldtrips & Guest Speakers

Information from the American Institute of Certified Public Accountants and the NYS-Young CPA's may also be utilized.

Business Law

Grade level: Open to grades 9, 10, 11, 12
40 weeks/5 meetings per week - 1 Unit
Required for Virtual Enterprise and Finance Academy students
Exam: Local

This course is designed to provide a thorough understanding of the basic principles of law that affect the consumer, worker and citizen.

- Rights of minors & Minor's contracts
- Basic Legal Rights/criminal law
- Law suits/civil law
- Contracts in Business
- Legal Careers

Business Math

****Eligible for Transferrable Advanced Studies Credit through ECC****
Grades: Open to grades 9, 10, 11, 12
40 Weeks/5 meetings per week -1 Unit
Exam: Local

*****Course may be taken as an elective or a 3rd unit of Math (**Students need to pass a minimum of two Mathematics classes and pass one Mathematics Regents Examination in order to be eligible for Business Math to be applied as the third year Mathematics option.

This course provides practical day-to-day applications involving mathematics. Some of the main topics include:

- Basic Math Skills Review
- Paychecks & Taxes
- Checking & Saving Accounts
- Loans, Installment Buying and Credit Cards
- Investments and Insurance
- Purchases, Sales, Mark-ups & Discounts
- Car Loans, Apartment Renting and Mortgages
- Financial Statements, Ratios & Charts
- Management, Partnerships, Business Costs & Inventory
- Current Events, Spreadsheets & Computer Research

Business Ownership - Virtual Enterprise

*****Eligible for transferrable Advanced Studies Credit through Buffalo State College*****
Grades: Open to grades 9, 10, 11, 12
Required for Virtual Enterprise and Finance Academy students
40 weeks/5 meetings per week – 1 Unit

Virtual Enterprise offers students the opportunity to experience a simulated business environment and examine all facets of being an employee of a firm.

- Learn how to operate your own business.
- Create a business plan for your own business and present it to a panel of business professionals/"potential investors."
- Work as employees in departments including Administration, Accounting, Marketing, Sales, and Personnel.
- Perform daily activities and contact other Virtual Enterprise firms to conduct business.

College and Career Prep for Juniors

Grade: 11 only
20 weeks/5 meetings per week – in the SPRING semester only - 1/2 Unit
Exam: Local

Spend time in class with teachers and guidance counselors preparing yourself for college while exploring career path possibilities:

- Start researching admissions requirements for colleges of interest
- Learn to use Naviance for college & career information
- Prepare for the SAT and/or ACT
- Strategically ask teachers to write you a letter of recommendation (the right way)
- Attend college fairs and the KW College Night
- Meet with college representatives
- Plan college visits
- Research summer opportunities, such as employment, educational programs, college courses for high school students, or volunteer work
- Complete your resume (on paper and on Naviance) and keep it up-to-date
- Develop college essay ideas
- Begin the college application process (Common Application, etc.)

College and Career Prep for Seniors

Grade: 12 only
20 weeks/5 meetings per week – in the FALL semester only - 1/2 Unit
Exam: Local

Spend time in class with teachers and guidance counselors preparing yourself for college while exploring career path possibilities:

- Learn to organize your post-high school planning
- Work on and submit college applications (Common Application in Naviance, etc.)
- Attend Financial Aid Night, College Night, College Consortium, etc.
- Create and/or update your resume (on paper and in Naviance)
- Research and apply for scholarships
- Apply for financial aid (FAFSA)
- Work on college essays
- Prepare and register for SAT/ACT

- Plan college visits and meet with college representatives
- Understand admission requirements for the colleges you are interested in
- Strategically ask teachers to write you a letter of recommendation (the right way)
- Fully understand your Senior Transition Plan
- Review your transcript for accuracy
- Understand college athletics

Computers and the Internet

*****Eligible for transferrable Advanced Studies Credit through ECC*****

Grades: Open to grades 9, 10, 11, 12
Required for Virtual Enterprise and Finance Academy students
40 weeks/5 meetings per week - 1 Unit
Exam: Local

Expand your knowledge beyond Facebook and playing games on the Internet. Learn how to type faster so that you can type your papers and projects faster.

- Learn the new features of Microsoft Office 2010 and how they will benefit you both in high school, college, and the workplace
- Explore the ever changing world of computer technology and various new technologies hitting the market
- Acquire the knowledge necessary to be able to write your papers quickly and in proper format.
- Create documents in Microsoft Word, produce spreadsheets with formulas and graphs using Microsoft Excel
- Develop databases using Microsoft Access and construct presentations using Microsoft PowerPoint

Computer Fundamentals

*****Eligible for transferrable Advanced Studies Credit through Buffalo State College*****

Grade: Open to grades 9, 10, 11, 12
Required for Information Technology Academy students
40 Weeks/5 meetings per week - 1 Unit
Exam: Local

Gain a comprehensive understanding of word processing, spreadsheets, presentation software, and databases.

- Students will develop advanced computer skills by creating documents using the advanced functions of Microsoft Word, Excel, Access, and PowerPoint.
- Students will compare and contrast Microsoft Office programs with the corresponding Google Apps.
- Students will gain a better understanding of the parts of a computer, networking, and managing & protecting data.

Personal Financial Literacy

****Eligible for transferrable Advanced Studies Credit through ECC****

Grades: Open to grades 9, 10, 11, 12
Required for Virtual Enterprise and Finance Academy students
20 weeks/5 meetings per week - 1/2 Unit
Exam: Local

Explore what you need to know to succeed in the "real world" after high school

- Learn how to manage money you earn, including bank accounts, credit cards, and investments
- Where does your paycheck go? Learn about budgeting, taxes, and social security
- Do you plan on getting a new car? Do you want to rent an apartment? What type of insurance will you need once you move out?
- How does what you buy, what stores you shop at, and how you spend your money affect the economy?
- Exploring careers and what you want to do after high school.

Internship - Career Exploration Internship Program

Grade Level: 12 Only
Required for Virtual Enterprise and Finance Academy students
20 Weeks/2 Meetings per Week + 54 Hours of Work On- Site Experience
Credit: ½ Unit

The Career Exploration Internship Program provides accepted students with hands-on experiences linking school and the workplace.

- Unpaid Internship in a student-chosen career area
- Class meets 2 days a week and student keeps daily journal
- Student must provide own transportation to their internship site
- Career awareness and research
- Job-seeking skills: Resume, cover letter, follow-up letter, interviewing skills
- Qualities of successful employment
- Workplace safety and health

Keyboarding & Personal Documents

****Eligible for transferrable Advanced Studies Credit through ECC****

Grades: Open to grades 9, 10, 11, 12
40 weeks, every-other-day **OR** 20 weeks/5 meetings per week
Credit: ½ Unit
Offering: Both semesters or Every Other Day
Exam: Local

Do you spend a lot of time typing your assignments and projects for school? Does your lack of typing speed slow you down from completing work? Learn how to type faster so that you can type your papers and projects faster.

- Acquire the knowledge necessary to be able to write your papers quickly and in proper format.
- Develop a resume and cover letter that can be used for college applications or to apply for jobs now or after graduation
- Learn how to format reports
- Develop a life-long skill that will benefit you in school and in the workforce

Microsoft Office

*****Eligible for transferrable Advanced Studies Credit through ECC*****
Grades: Open to grades 9, 10, 11, 12
40 weeks, every-other-day **OR** 20 weeks/5 meetings per week
Credit: ½ Unit
Offering: Both semesters or Every Other Day
Exam: Local

Do you think you know computers? Expand your knowledge beyond Facebook and playing games on the Internet.

- Learn the new features of Microsoft Office 2010 and how they will benefit you both in college and the workplace
- Explore the ever-changing world of computer technology and various new technologies hitting the market
- Create documents in Microsoft Word, produce spreadsheets with formulas and graphs using Microsoft Excel
- Develop databases using Microsoft Access and construct presentations using Microsoft PowerPoint

Personal Law – Criminal Justice and Your Rights

Grade: Open to grades 9, 10, 11, 12
20 Weeks/5 meetings per week -1/2 Unit
Exam: Local

Looking toward a career in law, law enforcement, or as a paralegal? This course is a basic introduction to the law as it applies to the student.

- Buying and Insuring your car
- Renting an apartment
- Buying real estate
- Marriage/divorce
- Credit cards and other loans
- Criminal Law: search & seizure, vandalism, shoplifting, and assault & battery
- Civil Law: law suits (torts) minors' rights under contracts

Sports and Entertainment Marketing

Grade: Open to grades 9, 10, 11, 12
40 weeks/5 meetings per week - 1 Unit
Exam: Local

Are you interested in a career in marketing or management? Do you want to own your own business? This course provides an excellent foundation for students who may pursue advanced business studies at a 2 or 4-year College.

- Basic Marketing Concepts
- Marketing Simulations including product and business development
- Exploring Careers in Marketing
- Business Organization & Finance.
- Forms of Ownership; franchises, partnerships, corporations
- Retail Psychology
- Television, Radio, Internet & Print advertising
- Retail Pricing strategies

Web Design I & 2

*****Eligible for transferrable Advanced Studies Credit through Buffalo State College*****
Grades: Open to grades 9, 10, 11, 12
Required for Virtual Enterprise and Finance Academy students
20 weeks/5 meetings per week - 1/2 Unit or 40 weeks/5 meetings per week – 1 Unit
Exam: Local

Learn how to create dynamic Web Pages:

- Learn how to create Web Pages using graphic design techniques to wow your audience
- Create Web Design using HTML programming
- Use Dreamweaver to design your Web site
- Explore the world of Adobe with Fireworks and Flash.
- Experience state of the art technology equipment to enhance your designs.
- Create cartoons and animations using Flash.

General Education Work Experience Program

Grades: Open to grades 11 & 12
40 weeks/Meets every-other-day— .5 Unit – 2 Units
Exam: Local
Credit depends on hours worked….see below

Students can work at their part-time jobs and earn high school credit. Jobs are obtained by the students themselves prior to school starting in September. Confirmation from the student's employer will be required at the start of the course. Course topics include

- Learning how to manage money you earn, including bank accounts, credit cards, and investments
- Career research, interview skills, and résumé writing
- Workplace laws

Students must pass the coursework in class in order to receive work credit as follows:

0.5 credit = 150-299 hours worked
1.0 credit = 300-449 hours worked
1.5 credits = 450-599 hours worked
2.0 credits = 600+ hours worked

ken·ton ACADEMIES
Launching A Dynamic Edge on Your Future

Virtual Enterprise & Finance Academy

NYS Career & Technical Education

KENMORE EAST & KENMORE WEST HIGH SCHOOLS

What is the Virtual Enterprise & Finance Academy?

The mission of the Virtual Enterprise & Finance Academy is to provide students with a challenging, student-centered, project-based academic, business/financial and technology program. Students will be exposed to the global business world and will be inspired to become respectful and successful members of a continually evolving financial community. Students who participate in this career-preparation academy will be developing and learning the skills necessary to be successful in today's financial world. This program focuses on preparing students for a variety of careers that are (or will) be available to high school and college graduates in the coming years.

Who should be interested in the Virtual Enterprise & Finance Academy?

ALL STUDENTS – male or female, motivated to be successful in post-secondary education and future careers. Students participating in the Finance Academy may be interested in careers in a variety of areas including:

- Finance
- Web Design
- Management
- Secondary and post-secondary education
- Accounting
- Marketing
- Business
- Military

Benefits of participating in the Virtual Enterprise & Finance Academy:

- Emphasis on academic excellence with specialized courses and classroom activities.
- An introduction to all facets of the financial services industry and exposure to current technology
- Field trips to local area businesses to learn about careers, operations and workplace environment.
- Class projects that mirror real world events and tie into the curriculum.
- Opportunity to earn college credits while in high school.
- Use of computers and cutting edge technology in the classroom to complete projects.
- Business partner mentoring, internships, and job shadowing.
- Enhanced opportunities for employment after graduation.

What courses are available to Virtual Enterprise & Finance Academy students?

The following courses are available to Virtual Enterprise & Finance Academy participants and any other student interested in exploring the rapidly-evolving world of Finance and technology:

Required Courses

- *Personal Financial Literacy*
- *Virtual Enterprise*
- *Business Law*
- *Computers & The Internet*
- *Accounting I*
- *Web Design 1 & 2*
- *Internship*

Electives:

- *Advanced Accounting*
- *Personal Law*
- *Work Study*
- *Business Math*
- *Computer Fundamentals*
- *Sports & Entertainment Marketing*

ENGLISH DEPARTMENT

COURSE OVERVIEW

Course	Credit	Weeks	Exam
English 8	1 unit	40	local
English 8 Honors	1 unit	40	local
English 9	1 unit	40	local
English 9 Honors	1 unit	40	local
English 10	1 unit	40	local
English 10 Honors	1 unit	40	local
English 11	1 unit	40	Regents
English 11 Honors	1 unit	40	Regents
English 12	1 unit	40	local
English 12 Honors	1 unit	40	local
AP English Literature*	1 unit	40	AP
AP English Language*	1 unit	40	AP
IB English Literature	2 units	80	IB
IB English Lang and Lit	2 units	80	IB
Theater 1	1 unit	40	local
Theater 2&3	1 unit	40	local
IB Theatre	2 units	80	IB
Creative Writing: Film Sty	1 unit	40	local
Journalism	1 unit	40	local
Advanced Publications/ Yearbook	1 unit	40	local

*One AP English course is required for pre-IB. Regents exam grade 85 or better.

Instruction in English is developmental in nature. Courses will improve listening, speaking, reading, and writing skills. Special emphasis is placed on the understanding and appreciation of literature.

In order to graduate, all students are required to pass the New York State Comprehensive Examination in English, usually given at the end of grade 11.

All potential Honors and AP students are required to complete an application and score an 85 or higher on the previous June's English final exam before acceptance into either program.

Any applicant who does not score at least an 85 on the June final exam in English will not be admitted into either the Honors or AP program.

English Curriculum Sequence

A. Four units of English are required for graduation. These units **may not include** credit from courses in Theatre Arts, Journalism, Creative Writing: Film Study, or Advanced Publications/Yearbook.
B. Students may attain a five-unit sequence in English.

C. Students may attain a 3 or 5 unit major sequence in Theatre Arts.

COURSE DESCRIPTIONS

English 8
English 8 is based on the Common Core Standards for English Language Arts and Literacy. The standards are organized to emphasize Reading, Writing, Language, and Speaking/Listening. Students will readily undertake the close attentive reading that is at the heart of understanding complex literature, as well as reading critically to comprehend large amounts of informational text in print and digitally.
40 Weeks
1 Unit
Examination: Local

English 8 (Honors)
Prerequisite: Students must have a 90% or higher average in grade 7 ELA, with a minimum of 85% on the final exam. Students will also be responsible for a summer reading assignment to be completed independently.

This course is recommended for students that achieved at a level of higher proficiency/mastery in Grade 7 ELA. Students will be challenged with rigorous text, both literary and informational. They will work to improve their critical reading, while examining writing techniques of various authors. Students will also work on analytic and communication skills as they focus on improving their writing craft.
40 Weeks
1 Unit
Examination: Local

English 9
English 9 emphasizes the intensive development of reading and writing skills.
Students continue to study a variety of both traditional and modern literature, including Greco-Roman mythology and multi-cultural literature. Instruction is also provided in library research skills.
40 Weeks
1 Unit
Examination: Local

English 10
This course continues the development of language skills – grammar and usage, spelling, vocabulary, reading, and effective library usage. Special emphasis is placed upon refining writing skills. Students will also have the opportunity to develop oral skills in panel discussions, interpretation, and individual reports. Literature includes a play by Shakespeare, modern plays, two novels, biography and autobiography, poems, essays, and a variety of short stories. Students do research and write a properly documented essay as a major component of their grade. Instruction in the use of the library continues.
40 Weeks
1 Unit
Examination: Local

English 10 (Honors)
This course is for advanced students who have mastered the basics. It will foster the development of advanced reading and writing skills. The literature will include works by such authors as Shakespeare, Dickens, Hemingway, and Steinbeck.
Prerequisite-85% or higher final average
40 Weeks
1 Unit
Examination: Local

Advanced Placement English Literature and Composition
This is a comprehensive course in reading, writing, and literary analysis for students who like to discuss both the form and content of imaginative literature-novels, plays, and poetry. The curriculum is a survey of writers from the 16th to the 20th centuries, and includes a brief survey of literacy criticism. The course will require frequent essays, outside readings, and a major paper each quarter, as well as summer reading.
All pre-IB students will be required to take the Regents Exam at the end of Grade 10 and score an 85 or better. If score is below 85 they must retake the Regents exam the following year.
40 Weeks
1 Unit
Grade: 10 & 12
Examination: AP/Regents

English 11
English 11 completes the preparation of students for the Comprehensive Examination in English. Skills in vocabulary, spelling, grammar, and reading comprehension are reviewed and strengthened. In-depth evaluation of literature is also stressed. Literature is chosen from works such as *Macbeth, Death of a Salesman, and Lord of the Flies*. Composition skills such as the organization and development of the multi-paragraph essay are an important part of the year's work. Students do research and write a properly documented essay as a major component of their grade.
40 Weeks
1 Unit
Examination: Regents

English 11 (Honors)
This is a course designed for students who have demonstrated strong academic ability and motivation. It requires solid reading comprehension skills, a strong vocabulary, and a mastery of basic grammar and usage skills. Following the Regents syllabus, the course provides an intensive study of literature and composition and includes work on research and oral communication skills. Literature includes works by such authors as Shakespeare, Miller, Camus, Williams, and Hesse.
Prerequisite-85% or higher final average
40 Weeks
1 Unit
Examination: Regents

Advanced Placement English Language and Composition
AP English language and Composition is essentially a college freshman English composition course. The focus will be on nonfiction writing and rhetoric, although some fictional literature will also be read. The reading in the course will focus on many essays by a variety of writers both contemporary and classic, and the intensive study of how writers create meaning, style, and a persuasive argument. Students will then incorporate these techniques into their own writing. Students will leave the course stronger readers and much better writers – the preparation will help them with the rest of their high school experience and into college.

IB English Literature OR
IB English Language and Literature (grade 11 and 12)
(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list). IB English is required of all IB Diploma candidates. Courses are designed to promote an appreciation of language and literature and to develop students' powers of expression, both in oral and written communication. Students read several texts grouped by themes or genres chosen by the teacher from a broad list of prescribed authors and works representing different styles and genres in English, as well as literature from other languages and cultures read in translation.
Pre-requisite: AP English Literature in grade 10; IB students
80 weeks
IB exam and assessments

ENGLISH 12
Senior English is the culmination of students' language development at Kenmore West. An emphasis on literature and analysis is at the core of each offering. Students will explore meaningful themes in a variety of works, ranging from classic to contemporary.
Students will improve their critical reading and writing skills through practice of in-depth spoken and written analysis of novels, short stories, drama, poetry, and film. Seniors will also complete a required research paper and work on college entrance essays.
40 Weeks
1 Unit
Examination: Local

English 12 Honors
English 12 Honors observes all of the learning standards for English Language Arts set by New York State, with an emphasis on in-depth reading and critical analysis of literature. The curriculum includes drama, narrative (short stories and novels), poetry, and film. Sophocles, Shakespeare, Tolstoy, and F. Scott Fitzgerald are some of the major authors who are critically examined. The works of British and American poets, historical and contemporary, are also read and analyzed. A critical research paper is required.
Prerequisite-85% or higher final average
40 Weeks
1 Unit
Examination: Local

English 12 Exam Policy
All English 12 students are required to take a final exam. The Advanced Placement exam counts as the final exam for AP students.

English Department Electives

Theatre 1
This course is a comprehensive introduction to theatre arts, developing the actor's basic skills. Students will perform monologues and scenes and learn the important elements of production styles and dramatic structure. This course will help any student gain poise and confidence before a group, and may be used as a fifth unit of English.
40 Weeks
1 Unit, local examination

Theatre 2 & Theatre 3 (Honors)
This is a performance course for the serious student of theatre, with an emphasis on advanced acting techniques, refining the skills introduced in Theatre Arts 1. Students will also perform monologues and scenes in various forms and styles, and work in production teams as directors, designers, dramaturges, and actors. Design portfolios and technical work is also required.
Prerequisite – Theatre 1 (Theatre 2 for Level 3), 85% or higher final average
40 Weeks
1 Unit
Examination: Local

IB Theatre
(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list). IB Theatre is a Group 6 option for the International Baccalaureate Diploma Program. This is a course that examines the skills of theatre production, the practices of both historical and modern theatre, and the practical application of the various theatre arts. No pre-requisite is required to take IB Theatre, but an interest in exploring the many aspects of this complex art is essential.
Pre-requisite: IB students only
80 weeks, IB assessments

Creative Writing I
Creative Writing I is a hands-on, interactive creative writing workshop. In this class you will work on poems, short stories, as well as creative non-fiction and long form writing. In a workshop framework, you will be sharing your work with your peers for feedback and support. A large part of the class is given to independent work, so you'll be able to pursue your own path in writing, as well as utilizing your creativity in ways you hadn't even imagined.
20 Weeks
½ unit
Final Project required (no exam)

Creative Writing II: Film Study
The goal of this course is to have students learn to read a film as they would a piece of literature. We will discuss how filmmakers use camera, lighting, sound, composition, motion, and editing to create such elements as plot, character, mood, and theme. We will view classic films as well as study genres and directors. Students will demonstrate their knowledge of films by participating in analytical discussions. There will be a variety of quizzes, tests, essays and film project.
Grade Levels: Open to 10, 11, 12; preference is given to juniors & seniors
40 Weeks
1 Unit
Final Project required (no exam)

Journalism
In this course, students focus on real-world journalism in the production of the online *Chronicle* - the school newspaper website. Students will learn and execute the different tasks involved in producing our online school paper, including conducting interviews, filming and photographing for articles and podcasts, public speaking (including podcasts), writing and editing copy, producing banner ads, and basic design and layout of an online newspaper. Students will be expected to complete a certain amount of work outside the classroom, which may include conducting interviews, reviewing theatre productions and/or movies, or doing on-site reporting as with sports events.

This course will require and develop skills in teamwork and time management (the work is manageable but deadlines MUST be met). Students will eventually have flexibility to specialize in some skills (layout, reporting, film work, etc.), but all students should expect to regularly write copy for online reports or blogs. Print and broadcast journalism will also be discussed. This course has received state approval to satisfy one unit in a five-unit major sequence in English.
40 Weeks
1 Unit
Final Project Required (no exam) 3201

Advanced Publications/Yearbook 1, 2, & 3

Mixed Advanced Publications/yearbook is a unique class for those students who want to work in a computer-based design environment. In this class students will be responsible for designing promotional material in various book formats including our yearbook. There is a heavy emphasis on layout skills, digital photography, problem-solving techniques, teamwork, desktop publishing, and creative design. Students are actively challenged in many disciplines ranging from the practical to the creative. This class requires a commitment beyond the confines of the classroom. In order to complete projects all students will be required to spend time outside of class on assignments. Students' work will be subject to staff critiques. Students will work in individual, small-group, and large-group environments. Each student is required to contribute towards personal and group objectives in a successful and productive fashion. A heavy emphasis is on developing skills that help students overcome obstacles, meet deadlines and achieve goals. **EXTENSIVE** time outside of class is required. If you have a job outside of class, please reconsider this elective.
40 Weeks
1 Unit
Grade: 10, 11, 12
Examination: Local

WORLD LANGUAGES

The study of foreign languages provides students with the ability to communicate with and understand the ways of people of different cultures. The immediate goals of our program are to enable students to speak, write, and demonstrate listening and reading comprehension in another language.

Checkpoint A Eighth Grade

Eighth graders have language class every day for the entire school year. This is the second half of the high school level course. Students typically continue the language they studied in 7th grade. Greater emphasis is placed on speaking, listening, reading, and writing in the target language. In June, the students take an equivalent to New York State Second Language Proficiency Exam as their final exam. Success on this exam, a passing grade of 65%, **and a passing average** will earn the student one high school credit toward graduation, and will fulfill the foreign language requirement for a N.Y.S. Regents Diploma.

Foreign language study may begin at **any** level. Students with an avid interest in a second language are encouraged to proceed to the highest level offered and to study in more than a single area.

Students are required by New York State to complete two years of foreign language study by the end of their ninth grade year earning 1 unit of high school credit (Checkpoint A 8th Grade). Most students continue studying the foreign language and earn 2 additional credits (Checkpoint B) and earn a ***Regents Diploma with Advanced Designation***.
Note: Pre-IB Class of 2020 *must* register for honors-level World Language B2.

Checkpoint A

Most students will have completed Checkpoint A in 8th grade by successfully completing 2 units of instruction in World Languages and passing the NYS Regents approved SLP Exam. Checkpoint A can also be completed in the high school in one year of study in ninth grade.

Checkpoint B

Courses B1 and B2 take students beyond the basic skills
which are learned in Checkpoint A and prepare them for the New York State Regents-approved Examination given at the end of the B2 course.

Checkpoint C

Post Regents Study: Intended for those who have previously excelled in the study of language. This level is highly recommended for college-bound students who will most likely have to meet a specific language requirement.

COURSE DESCRIPTIONS

Spanish A

Introduction to the target language includes phonology of the language, basic structure necessary for common conversation, and basic vocabulary. Emphasis is placed on comprehension of authentic speech and speaking in an everyday conversational setting. Reading of authentic public announcements and messages, writing of simple sentences pertaining to personal needs and short messages are included. An introduction to culture and customs is included in this course.
40 Weeks
1 Unit
Examination: Local

French B1, German B1, Spanish B1

The B1 course is an expansion of the basic skills learned in Level A. There is an increased emphasis on listening and speaking skills, with comprehension of short conversations a major factor. There will be work to sustain conversations appropriate to this level. Reading for comprehension of narratives and descriptive authentic materials will be reintroduced, as well as the writing of simple notes and letters. Creative projects may be included to strengthen the skills of listening, speaking, reading and writing.
Prerequisite: Level A
Grade Levels: 9, 10, 11, 12
40 Weeks
1 Unit
Examination: Local Ken-Ton District

French B2 (R), German B2 (R), Spanish B2 (R)

Students continue to refine the four basic skills of language: listening, speaking, reading, and writing. Comprehension of both individual and general topics will be achieved. Students will be able to sustain conversations. Reading will be specific comprehension of selected passages. Writing will show ability to express ideas comprehensively. Students will prepare for the Regents-approved exam in the target language. Students admitted to this course will continue to expand their skills in preparation for the Regents-approved examination. Some in-depth reading may be done and writing skills will be emphasized.
Prerequisites: French B1 R, German B1 R, Spanish B1 R
40 Weeks
1 Unit
Examination: French German and Spanish Regents-approved Examination

French B2 (H), German B2 (H), Spanish B2 (H)
Students admitted to this course will continue to expand their skills in preparation for the Regents-approved examination. Classes will be conducted primarily in the target language. More in-depth speaking, some in-depth reading may be done and writing skills will be emphasized. **(Pre-IB required course)**
Prerequisites: Level B1(R) & Teacher Recommendation
40 Weeks
1 Unit
Examination: French, German and Spanish Regents-approved Examination

French C1 (H), German C1 (H), Spanish C1 (H)
The C1 course in the target language is communication oriented. Students learn to control with greater ease and fluency the skills they have previously learned. They are exposed to literature, history and culture, and classroom discussions in the foreign language. The exact curriculum correlates with the SUNY College System. A final evaluation will be given. Up to 3.5 SUNY college credits are available.
Prerequisites: Level B2 & Teacher Recommendation
40 Weeks/5 Meetings per Week – 1 Unit
Examination: Local

French C2 (H), German C2 (H), Spanish C2 (H)
The objective of the C2 course is the development and application of an appreciation of the target language and some of its literary expressions. In speech and in writing, students will be able to express mature reactions, opinions and sound critical judgments in correct, contemporary language. A final evaluation will be given. Up to 3 SUNY college credits are available.
Prerequisite: Level C1 & Teacher Recommendation
40 Weeks/5Meetings per Week-1 Unit
Examination: Local

IB French, German, Spanish
(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
Students will be expected to: 1) communicate and substantiate ideas using a range of commonly used vocabulary, 2) understand and respond to a variety of written and spoken material on the intermediate level, and 3) apply knowledge of the language and culture by demonstrating sensitivity to and awareness of global issues, ideas, and customs.
Pre-requisite: World Language B2H, IB students only
80 weeks
IB exam and assessments

FAMILY & CONSUMER SCIENCES

Family & Consumer Sciences combines academics, technical, and employability skills with real-life context for learning that maximizes students' present and future academic and career success. Performance based assessments are used in all courses. Courses can be taken in clusters or as individual electives.

Learning Standards for Family & Consumer Sciences

1. *Personal Health & Fitness*

Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity, and maintain personal health.

2. *A Safe & Healthy Environment*

Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

3. *Resource Management*

Students will understand and be able to manage their personal and community resources.

Family & Consumer Sciences Sequences

Sequences in Family & Consumer Sciences must follow the general pattern of all Career and Technical Education Sequences. Each three-unit sequence must have:

- One unit of two CORE courses (Food/Nutrition CORE, Human Development CORE)
- One-half (1/2) unit in Independent Living (FACS Department) or Career and Financial Management (Business Department)
- One unit focused on sequence specialization (Food/Nutrition or Human Services/Family Studies)

Course Descriptions

The Food and Nutrition Sequence

Foods I
Students interested in developing personal cooking skills or food service careers will find this class valuable. Participation on food lab activities helps students develop skills in food preparation. Stu-

dents will apply nutrition knowledge to promote health. Labs include preparation of pasta, fruits, vegetables, and healthy meals.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

Foods II
Mastering the art of food preparation is the focus as students build upon the concepts learned in Foods 1. The daily living and career benefits of culinary skills are emphasized. Food lab experiences include preparation of meats and poultry, seafood, salads, soups and seasonal specialties. The Baking unit includes cakes, pies, quick breads and yeast breads.
Prerequisites: Foods I
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

Nutrition/Health & Fitness
Through this course, the student will assess their personal fitness and eating habits. A personal plan for lifetime fitness will be designed. The diet throughout the life cycle will be reviewed. Safe and unsafe nutritional practices related to various athletic sports will be discussed. Sample diets will be analyzed. Food labs will include preparing healthy and nutritious foods and alternative diets, including vegetarianism.
Prerequisites: Foods I
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

Global and Gourmet Foods
The influence of culture on foreign and American food is the focus of this course. Content includes menu planning and advanced food preparation techniques. Food lab experiences include American food and foods from around the world.
Prerequisites: Foods I
Grade Levels: 10, 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

The Human Services & Family Studies Sequence
Housing and Interior Design
This course is designed to familiarize the students with housing design and the factors to be considered when making housing decisions. Students will learn about interior and exterior design through a variety of class projects and activities. Careers related to housing, household management, and interior design will be explored.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Exam: Local/Performance Assessment

Teen Living
This course focuses on practical problems related to taking responsibility for self and others, building self-esteem, developing positive relationships with family, children and peers, managing stress and conflict. Students will investigate numerous issues facing today's teen and explore careers in the field of Human Services.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Exam: Local/Performance Assessment

Parenting
*Satisfies the NYS Parenting Education requirement for graduation
This course is centered upon the vast number of choices individuals make in relation to parenting. The economic, social, educational and physical conditions that influence parenting are identified and their implications explored. Problem solving, resource management, character development, teamwork, lifelong learning, communication skills, and flexibility to adapt to changes associated with parenting are examined. Community resources available to parents will also be explored.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

Child Development
The physical, emotional, intellectual, and social development of the infant, toddler, preschooler, school age child, and children with special needs will be studied. Daily care, guidance, discipline, other parenting/caregiver, and social concerns will be studied and practiced in a variety of situations. A preschool/play school program is a culminating activity.
Prerequisites: None
Grade Levels: 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

Independent Living
This course is designed to assist students looking at, applying to and surviving the first year of college. Life on your own and the world of work will also be discussed. Students practice and show competence, leadership, and financial management skills needed for successful living in college and beyond.
Prerequisites: None
Grade Levels: 11, 12
20 Weeks
½ Unit
Examination: Local/Performance Assessment

HEALTH EDUCATION

Health Grade 8
Health Education is a NYS required 20-week course. The curriculum is focused on attaining health literacy through the development of decision making, communication, advocacy, goal setting self-management and relationship management skills. Areas of study include: Injury & Violence Prevention, Nutrition & Physical Activity,

Stress Management, Family Life/Sexual Health, Sexual Risk, HIV/AIDS, Alcohol, Tobacco and other drugs.
The student is expected to participate in classroom discussions and activities (i.e., oral reports, research papers, homework, etc.). Community/school resources are used to acquaint students with the skills in accessing valid health information, products and services.
Prerequisites: None
20 Weeks (Every day for 20 weeks or every other day for 40 weeks)
Special Materials Required: Notebook

Health Grades 9, 10, 11 and 12
Health Education is a NYS required half year course that aims to arm students with essential skills that pertain to self & relationship management in order to optimize their quality of life. Health Education's higher learning objectives include: creating life-like scenarios in which the student may practice those skills, demonstrate their health literacy and promote healthy lifestyles through advocacy. Areas of study include: Risk Behaviors, Bullying/Violence Prevention, Decision Making, Values, Communication, Nutrition, Stress Management, Mental Health, Human Growth & Development, Sexuality & Relationships, Disease Prevention, Social & Community issues related to Alcohol, Tobacco and other drugs.

The student is expected to participate in classroom discussions and activities (i.e., oral reports, research papers, homework, etc.). Community/school resources are used to acquaint students with the skills in accessing valid health information, products and services. Satisfactory completion of health course is required for graduation.
Prerequisites: None
20 Weeks (Every day for 20 weeks or every other day for 40 weeks)
½ Unit
Special Materials Required: Notebook & Projects (explained by teacher)
Examination: Local

MATHEMATICS

Course	Credit	Length(wks)	Exam
Algebra I	1 unit	40	Regents
Geometry	1 unit	40	Regents
Geometry Honors	1 unit	40	Regents
Algebra II	1 unit	40	Regents
Algebra II Honors	1 unit	40	Regents
Intermediate Algebra	1 unit	40	Local
Pre-Calculus	1 unit	40	Local
Pre-Calculus Honors	1 unit	40	Local
Advanced Algebra 1	1 unit	40	Local
Advanced Algebra 2	1 unit	40	Local
AP Statistics	1 unit	40	AP
AP Calculus	1 unit	40	AP
IB Mathematical Studies SL	2 units	80	IB
IB Mathematics SL	2 units	80	IB

Academic Intervention Services (AIS)
Any student who enters ninth grade and who scored a one or a two on the eighth grade Regents Mathematics Assessment and/or any student who fails the Algebra, Geometry, and / or Algebra II Examination is required to receive Mathematics remediation beyond their regularly scheduled mathematics course.

Recommendation for College Bound Students
Any student considering a two-year or four-year program in college is **strongly encouraged** to select a full four-year sequence of high school mathematics appropriate to the student's ability.

Calculator Requirements
The TI-84+ Graphing Calculator is used regularly in most Math courses. While Kenmore West has sets of these calculators for classroom use, we ***strongly recommend*** students purchase their own calculator. In most courses homework assignments will require the use of a graphing calculator. This calculator is also used in science courses and at the college level. Students are required to use this calculator on all Regents and AP math examinations.

COURSE DESCRIPTIONS

Algebra I
This course is for all 9th graders with the exception of accelerated students. Topics include patterns in data, patterns of change, linear, exponential and quadratic function models, graph models, and polynomial work with emphasis on problem solving, reasoning, communicating and multiple representation of the mathematics. (Passing score of a 65% or higher on the Algebra I exam satisfies the graduation requirement.)
Prerequisites: None
Examination: Algebra I Regents Exam
40 Weeks
1 Unit

Algebra A
This is the first course in a 2-year sequence leading to the Algebra I exam.
Prerequisites: Teacher recommendation
Examination: Algebra A local exam
40 Weeks
1 Unit

Algebra B
This is the second course in the 2-year sequence leading to the Algebra I exam.
Prerequisites: Successful completion of Algebra A
Examination: Algebra I Regents Exam
40 Weeks
1 Unit

Algebra Lab
Students in Algebra I who are at risk, based on their middle school math performance, are required to take Math Lab.

Geometry
This course includes extensions of strands from Algebra I such as graphing linear functions and three dimensional geometric shapes. New topics include circles, three-dimensional geometry, transformational geometry, geometric constructions, and proofs of coordinate (Euclidean) or analytical (deductive) nature. A passing grade on the Geometry Regents examination is needed to earn an Advanced Regents diploma.
Prerequisites: successful completion of Algebra I (final average of 65% or higher)
Examination: Geometry Regents Exam

40 Weeks -1 Unit

Geometry H

This honors course covers all of the material found in Geometry but the topics are studied in greater depth. Additional topics may be included.

Prerequisites: Teacher recommendation, 90% or higher final average in Algebra
Examination: Geometry Regents Exam
40 Weeks
1 Unit

Algebra II

Students taking this course should have a strong background in previous mathematics courses to be successful. This course will continue to build upon topics studied in Algebra I in order to prepare students for the Algebra II Regents exam. Topics in this course include logarithms, trigonometry, exponents, complex and real numbers, rational expressions, and functions. A passing grade on the Algebra II Regents examination is needed to earn an Advanced Regents diploma.

Prerequisites: Teacher recommendation, ***80% or higher final average in Algebra I and a passing score on BOTH the Algebra I and Geometry Regents exams.***
Examination: Algebra II Regents exam
40 Weeks
1 Unit

Algebra II Honors

This honors course will include a study of all of the topics listed for Algebra II, but in greater depth. Many of the thinking skills required, and problems presented, will be beyond the scope of the average student at this grade level. Additional topics may be included.

Prerequisites: Teacher recommendation, ***90% or higher final average in Algebra I and a passing score on BOTH the Algebra I and Geometry Regents exams.***
Examination: Algebra II Regents exam
40 Weeks
1 Unit

Intermediate Algebra

This is a one-year credit-bearing elective math course that counts towards a student's mathematical commencement requirements and meets New York State's mathematics requirements towards earning a Regents Diploma. It is aligned to the Common Core Learning Standards and is intended to be an alternative third-or fourth-year math course. Intermediate Algebra applies, connects, and extends the math skills learned in Algebra I and Geometry to real-world applications through the use of technology and hands-on activities.

Students who take Intermediate Algebra may go on to take Algebra II as their *fourth year* of Math with the Algebra II Regents exam for advanced Regents credit. Students who take Intermediate Algebra may also go on to take Advanced Algebra 1, which would give them the opportunity to earn college credits through Erie Community College (E.C.C.).

Topics in Intermediate Algebra include: advanced algebra, trigonometry and normal distributions.

Prerequisites: Successful completion of two math department courses
Examination: Semester exams in January and June
40 Weeks
1 Unit

Pre-Calculus

The emphasis in this course is on preparing students to study Calculus. All material is covered at a demanding level which will provide the rigorous background needed for a study of Calculus. Topics include the study of polynomial and rational functions, modeling motion with vectors, and extensions of logarithmic and trigonometric functions, as well as an introduction to calculus.

Prerequisites: successful completion of Algebra II
Examination: Semester exams in January and June
40 weeks
1 Unit

Pre-Calculus H

This Pre-Calculus course also uses a graphing calculator-based approach. All topics covered in Pre-Calculus will be included, but in greater depth. The final examination will include an evaluation of each student's portfolio of problem-solving experiences developed throughout the year and an oral presentation.

Prerequisites: Teacher recommendation, 80% or higher final average in Algebra II
Examination: Semester exams in January and June
40 Weeks
1 Unit

Advanced Algebra 1

This course is recommended for students who plan on attending college. It is the first year of a two-year sequence leading to the Algebra II exam. Topics include transformations of functions, sequences and series, logarithmic and exponential functions, quadratics, systems of equations and set theory. **You may be able to earn four college credits through Erie Community College (E.C.C.) by taking this course!**

Prerequisites: Successful completion of two math department courses
Examination: Final exam in June
40 Weeks
1 Unit

Advanced Algebra 2

This course is recommended for students who plan on attending college. The first semester focuses on trigonometric statistical topics to prepare the students for the Algebra II Exam in January. The second semester will focus on advanced topics to prepare students for college math.

Prerequisites: Successful completion of Advanced Algebra 1 or completion of Algebra II
Examination: Algebra II Regents exam and June exam
40 Weeks
1 Unit

Advanced Placement (AP) Statistics

Advanced Placement Statistics is a full-year course designed to prepare students to take the AP Statistics examination and obtain college credit. Nearly as many college students are required to take a statistics course as are required to take a course in calculus. Students interested in fields such as psychology, business, or health medicine should consider enrolling in this course. Projects are an integral part of the course. The curriculum includes exploring data, planning studies, studying probability, and drawing statistical inferences (recommended course outline of The College Board).

Prerequisites: Teacher recommendation
Examination: AP & Local (Project)
40 Weeks
1 Unit

Advanced Placement (AP) Calculus

Advanced Placement Calculus (AB) is a full-year mathematics course designed to prepare students to take the AP Calculus examination and obtain college credit. This course is equivalent to approximately 1.5 semesters of college calculus course and covers the theory, techniques, and applications of both differential and integral calculus, emphasizing properties of functions and their graphs (recommended course outline of The College Board). Most colleges require a student to take calculus in order to prepare for a career, not only in mathematics and engineering, but also in the sciences, psychology, economics, and business administration.
Prerequisites: Teacher recommendation, successful completion of Pre-Calc / Pre-Calc H (Alg II -or- Alg II H student by teacher recommendation only.)
Examination: AP & Local (Project)
40 Weeks
1 Unit

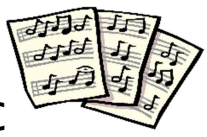
IB Mathematical Studies SL

(Note: For more information about the IB programme, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Math Studies is a Group 5 course for IB students at grade-level in math. The course emphasizes the application of mathematics to real-life situations. The core consists of studies in several topics: numbers and algebra, set theory, geometry and trigonometry, statistics and probability, functions, introductory differential calculus and financial mathematics. Students will also study at least one the following additional topics: matrices, graph theory, and higher level statistics and probability. This course is taken in one year during the junior year of IB. There is an additional requirement of time after school for this course since it is finished in one year. Students will stay 1-2 days per 6-day cycle after school.
Pre-requisite: IB students only
80 weeks, 2 units
IB exam and assessments

IB Mathematics SL

(Note: For more information about the IB programme, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Mathematics is a Group 5 course for IB students who are accelerated in math. The core consists of study in six topics: numbers and algebra, functions and equations, circular functions in trigonometry, vector geometry, statistics and probability, and calculus. Students also complete an Internal Assessment on a topic of their choice.
Pre-requisite: Algebra II, IB students only
80 weeks, 2 units or 40 weeks, 1 Unit
IB exam and assessments

MUSIC



The Music Department offers a variety of courses of interest, not only to music majors but also to students majoring in academic areas.

Any credit for in-school music may be used to meet the Music/Art requirement for graduation.

Musical Performance

All students enrolled in major performing groups are required to continue lessons and to participate in school programs, assemblies, concerts, commencement, and such special events as are appropriate to their group. Performance students are given the opportunity to audition for NYSSMA music ratings and to compete for participation in County, Sectional, and All-State Music Festivals.

COURSE DESCRIPTIONS

Concert Band

The organization is for students who play wind or percussion instruments. Students will be taken from regularly scheduled classes on a rotating basis for lessons. After school, evening, or weekend rehearsals or performances are required. Students enrolled in Band may also join the school's Pep Band or Jazz Ensemble, both extracurricular activities.
Prerequisite: Performance Ability
Grade Levels: 8, 9, 10, 11, 12
40 Weeks/Every Other Day –
½ Unit
Examination: Local

Orchestra

This ensemble is for students who play or would like to play stringed instruments: violin, viola, cello or bass.
Students will participate in the string orchestra ensemble. There is also a select group available upon audition which concentrates on more challenging levels of music. This course is designed to improve technical, historical and cultural awareness of primarily Western European classical repertoire and its outgrowths. Students will participate in lesson labs that rotate through the school's daily schedule. Students are responsible for making up missed work. After school, evening and weekend rehearsals and/or performances are sometimes required. Course runs full year with every day or every other day depending on class load.
Prerequisite: None
Grade Levels: 8, 9, 10, 11, 12

Choir

The Choir is a select, mixed voice (male and female) singing group whose members are chosen by audition. The choir performs a great variety of choral music including pop, classical, and show selections in various programs for the schools and community during the year. When it is appropriate, musical numbers are staged to enhance the visual aspects of performance. Afterschool and evening rehearsals or performances are sometimes required.
Prerequisite: Selection through audition
Grade Levels: 10, 11, 12
40 Weeks
1 Unit
Examination: Local

Chorus

Chorus is open to all students without an audition and offers everyone the opportunity to improve his/her musical ability, singing technique, confidence, and stage presence. All types of music from

Bach to Broadway will be sung and performed in concert. After-school and evening rehearsals or performances are sometimes required. There are two separate choruses – one for boys, and one for girls.
Prerequisite: Interest
Grade Levels: 8, 9, 10, 11, 12
40 Weeks/Every Other Day - ½ Unit
Examination: Local

Music In Our Lives

This is an intermediate (basic) class in Music Theory and Music History. It is recommended for those students anticipating a career in music, but it is also a desirable course for those who want to increase their knowledge of music. Students are encouraged to register that have several years of lessons on an instrument, and/or experience singing. Course content includes Sight Singing to develop the "musical ear" for dictation, and melody writing. Music theory includes lessons on major/minor scales, intervals, chord analysis, non-harmonic tones etc. Music history includes listening to a wide variety of "classical" music to develop the pleasure one has as an audience member. Students will also be helped to develop basic keyboard, and composition skills.
Prerequisite: None
Grade Levels: 9, 10, 11, 12
40 Weeks
1 Unit
Examination: Local

AP Theory

This is a continuation of Theory 1 and Theory 2. More difficult harmonization is introduced along with melody writing and the analysis of more difficult music. Practical application is stressed through the use of keyboard and voice as well as original composition projects.
Prerequisite: Theory 1 and Theory 2
Grade Levels: 10, 11, 12
40 Weeks
1 Unit
Examination: Local

THEORY 1

The objective of Music Theory 1 is to provide students with a basic understanding of the rudiments of music. These rudiments include ear training (melodic, interval, and rhythmic dictation), and music vocabulary (terms used in published music). Practical application is stressed through the use of keyboard and voice as well as original composition projects.
The following students should take this class:

- If you are interested in a career in music
- If you plan pursuing a degree in music
- If you play guitar but can't read music
- If you want to write your own music
- If you plan on taking AP Theory
- If you are interested in IB Music

Grade: 9,10,11,12
40 weeks every other day or 20 weeks everyday
Exam: Local
1/2 Full Credit
Prerequisites: none

THEORY 2

Course Overview

Music Theory 2 is a half-year course of continued fundamental skills needed for reading and writing music. The subject matter will cover a variety of topics including the language of music, note reading and creating, ear training, the study of scales, chords, chordal progressions, and higher level music analysis.

The objective of Music Theory 1 is to provide students with a basic understanding of the rudiments of music. These rudiments include ear training (melodic, interval, and rhythmic dictation), and music vocabulary (terms used in published music). Practical application is stressed through the use of keyboard and voice as well as original composition projects.
The following students should take this class:

- If you are interested in a career in music
- If you plan pursuing a degree in music
- If you want to write your own music
- If you plan on taking AP Theory

Grade: 9,10,11,12
40 weeks every other day or 20 weeks everyday
Exam: local
1/2 Full Credit
Prerequisites: Theory 1

CAREER AND TECHNICAL EDUCATION

BOCES Career and Technical Education

The Board of Cooperative Education Services (BOCES) offers students many opportunities not available at Kenmore West. Skills and knowledge gained in these courses will prepare students for entry into skilled trades and/or to additional post-secondary education. BOCES programs offer challenging opportunities to students of all academic interests and abilities.
Students enrolled in BOCES programs spend one-half of the school day at the Kenton or Harkness Centers and the remaining time at Kenmore West. Students attend classes in early morning, midday or afternoon.

Preliminary information is given to students at meetings in our building by counselors during the scheduling process. Prospective candidates should seriously consider making a visit to one of the vocational centers prior to their final enrollment. Detailed information and program planning is available as students meet with counselors.

All BOCES vocational credits can be used for Local, Regents, Adv. and Reg. diplomas. BOCES may be used to substitute the 3-unit World Language requirement. Students interested in a BOCES vocational program should begin planning their program in their ninth grade year.
Students must see their counselor to sign up for a BOCES program. Courses fill up quickly; students are advised to register early to avoid being put on a waiting list.

Program Offerings

(Program availability and locations are subject to changes.)

HARKNESS CENTER
99 Aero Drive
Cheektowaga, New York 14225

POTTER CENTER
705 Potter Road
West Seneca, NY 14224

Phone: 961-4070 Phone: 821-7331

KENTON CENTER
151 Two Mile Creek Road
Tonawanda, New York 14150
Phone: 961-4010

Courses Offered

Animal Science
Auto Technician Training
Aviation Technology
Baking & Pastry Arts
Barbering
Building Trades
Business Management & Marketing
Career Exploration
Collision Repair
Connections-Health Related Careers
Cosmetology
Criminal Justice
Culinary Arts
Cybersecurity and Networking
Dental Laboratory Technology
Digital Media
Early Childhood Education
Electrical Systems
Electronics and Computer Technology
Engineering and Robotics
Fashion Design and Merchandising
Health Careers
Legal Academy: New Visions
Nail Specialty
Plumbing, Heating and Air Conditioning
Sports Science Careers
Video Production and Recording Arts
Web Technologies & Game Programming
Welding
Zoo Wildlife and Conservation Careers

COURSE DESCRIPTIONS

ALP with Parenting
This is a unique program offering pregnant and parenting teenagers in grades 9-12 the opportunity to complete their high school education. This full day program meets the educational, health, parenting, and psycho-social needs of the young parent and her child. ALP with Parenting is offered at the Dexter Terrace Occupational Centers.
Multi-Year Program

Animal Science 1&2
The expanding pet industry offers a variety of career opportunities for animal loving students. This new, two-year program teaches basic and advanced skills in areas such as nutrition, health and disease, animal handling and restraint, grooming, pet first aid, and medical terminology. This program provides both classroom instruction and hands-on learning with labs and a clinic. Upon completion of this program students can go onto entry-level employment or pursue further education in the fields of veterinary science, biology, business management, pet grooming and more.

Automotive Technician Training 1&2
The Automotive Technician Training Program includes skills necessary to troubleshoot and repair the complex systems of today's high-tech automobiles. Students will learn to diagnose, adjust, and repair engines, steering/suspensions, brakes, and electrical components by performing actual repairs on vehicles in a commercial auto repair shop laboratory.
2-Year Course – 3.75 Units per year

Aviation Technology
This course will expose students to the world of aviation. Students will develop the skills, attitude, and flight background required by the aviation industry. Federal Aviation Administration regulations, pilot training, airport security, screening procedures, and ground control will be covered in this exciting program! Erie 1 BOCES has partnered with Prior Aviation to provide students with simulated flight training and up to 8 hours of actual flight time!
1-Year Course

Baking & Pastry Arts 1&2
Baking and Pastry Arts offers students an opportunity to understand what goes into creating beautiful finished pastries, breads and cakes. Students will not only produce these baked goods in both large and small quantities, but the science behind them. Baking students have an opportunity to create beautiful show pieces, plated desserts, chocolates, and individual pastries. Students will also have a chance to gain on-the-job experience during their internship program and gain the necessary experience to enter the baking and pastry industry at the entry level.

Barbering
Students learn the art of barbering from experienced instructors, guest speakers and Master Barbers who currently work in the industry. Students as young as seventeen can obtain a Master Barber's license by learning the NYS Board techniques and passing the NYS Master Barber's practical exam.

Building Trades 1&2
This program offers instruction in carpentry and associated trade areas. Students participate in construction modules of introduction to carpentry, foundation and floor framing, wall framing, ceiling and roof framing, interior and exterior finish, cabinet making and remodeling with an introduction to masonry, plumbing and electrical systems. Practical experience through a variety of in shop projects plus internship opportunities with regional contractors and businesses are provided to all students.
2-Year Course – 3.75 Units per year

Business, Management, and Marketing
This is the newest one-year program for honors-level seniors. Students will be fully immersed in these areas, and the hospitality industry, via a series of work-based learning experiences designed to showcase the endless employment areas available across Western New York.

Career Exploration

This program is a one-year exploratory occupational program. It offers students experiences from a variety of vocational program offerings to help students make decisions about future programming. Placement is in an established class and students follow a set of objectives while completing modified projects designed for them. A student may explore eight different occupational programs for five weeks each. At the end of each module, the teacher evaluates students on the basic skills presented: career awareness, adherence to basic safety regulations, and observed interest. These evaluations are sent to the home school's counseling department. This will assist students in selecting an appropriate occupational program for the following year:
1-Year Program – 3.75 Credits
Grade: 10

Collision Repair 1&2
The first 10 weeks of this program will consist of a core introduction to the automotive industry. Students will then specialize in Auto Collision Repair for the remainder of the program. This program will cover the total process of auto body restoration: metal straightening, glass and panel replacement, fiberglass repair and all painting preparation and finishing techniques. Students will also perform repairs on donated vehicles and participate in an internship at a local automotive collision repair facility.
2-Year Course – 3.75 Units per year

Connections: Health Related Careers
This exciting program gives honors-level high school seniors the opportunity to observe careers in many allied health areas through a mentor relationship with a practicing professional. This 4 credit program includes Anatomy, Physiology and Disease, Health Core/Internship, English 12 and Social Studies: Participation in Government & Economics. Each of these 1 credit courses is integrated into the curriculum. Students spend three hours each day at a designated hospital site taking course work and observing all aspects of health careers.
1 Year Course - 4 Units

Cosmetology 1&2
This program prepares students for subsequent employment in the field of Cosmetology. Instruction will enable students to provide beauty services in all the basic skills and current trends in the profession. A clinic experience in which outside customers participate in the school beauty salon allows students to practice hairdressing and customer relation skills. The program has two parts: Cosmetology I and II are taken during the high school junior and senior years and provide sequence credit only. In addition, a post-secondary program usually taken the summer following graduation is required to be eligible for the New York State licensing examination in Cosmetology.
2-Year Course – 3.75 Units per year

Criminal Justice 1&2
The Criminal Justice program is intended for students interested in pursuing a career in the fields of criminal justice and / or security. The course covers government, law enforcement, courts, corrections, security, forensic science, and related topics. Criminal Justice and security personnel from local agencies and businesses participate in the program. The purpose of the program is two-fold: first to prepare students for post-secondary education in Criminal Justice or a related discipline. Second, it prepares students for entry level work in the criminal justice and security fields.
1-Year Course – 3.75 Units per year

Culinary Arts 1&2
The major emphasis in this program is on quality of preparation and presentation in both small and large quantity cooking. Both theory and hands-on experience are included in such areas as: menu planning, methods of cookery, table service, storeroom procedures, food control, sanitation, and food costing. Advanced instruction teaches basic managerial and supervisory techniques. Frequent catering for school activities and part-time work in the industry provide on-the-job experience. Students develop the necessary preparation, service, managerial and human relations skills for the food service industry.
2-Year Course – 3.75 Units per year

Cybersecurity and Networking 1&2
This course will examine cybercrime and consider its impact on law enforcement, national security, the corporate world and society. Students will enter the world of designing, building and maintaining networks capable of supporting and protecting national and global organizations in every industry. Students will gain skills needed to design and implement internet connectivity, Wide Area Networks (WANs) and Local Area Networks (LANs). The program is adapted to suit individual need and features hands-on, project-based training in high-demand job skills. The curriculum is aligned with National Science Education Standards, the American Association for the Advancement of Science Project 2061 Benchmarks, and Dartmouth Engineering Problem-Solving Methodology.
2-Year Course

Dental Laboratory Technology 1&2
The Dental Laboratory Technology Program is intended for students interested in pursuing a career in dental lab technology, dentistry, dental hygiene and dental assisting. The course covers five specialties of dental laboratory technology: complete denture, partial denture, crown and bridge restoration, porcelain and ceramics and orthodontics. A combination of science, art, skill and craftsmanship along with a complete comprehension of basic techniques, materials, anatomy and terminology will enable the students to fabricate an appliance from beginning to end. The program will prepare students for post-secondary education and / or entry level work in the dental field.
2-Year Course – 3.75 Units per year

Digital Media 1&2
This new and exciting program is designed to introduce students to elements of media as they relate to various technical disciplines. Students will rotate through creative and technical programs and complete an individual, hands-on project in each of the following areas: music and sound production; media design, digital film and video, digital technologies; and gaming and animation. Students will culminate the year with a full industry experience project, incorporating skills from each program.
1-Year Course

Early Childhood Education 1&2
The Early Childhood Program provides an in-depth study of early childhood care and education (birth – 8 years). Students will participate in and create a variety of activities for infants, toddlers, and

preschoolers. Creative activities in the areas of music, art, science, math and storytelling will be investigated and practiced. Students will have a variety of hands-on experiences in both the Erie 1 BOCES playgroup and on-site preschool! Students in this program will also participate in an internship, create a professional portfolio and develop curriculum and lesson writing skills. Students who complete the program are ready to enter the job market as teacher aides, day care providers, or get a head start in college.
2-Year Course – 3.75 Units per year

Electrical Systems 1&2
This course deals with the application of electrical technologies in all phases of the electrical industry. It prepares students for the planning, installation, maintenance and troubleshooting of wiring systems in residential and light industrial settings according to the standards of the National Electrical Code. Instruction in principles of electricity, reading of blueprints and wiring diagrams, proper use of tools and equipment, and basic principles of motor controls with ladder logic are covered. Installation of solar and wind technology is emphasized.
2-Year Course – 3.75 Units per year

Electronics & Computer Technology 1&2
Students in the Electronics & Computer Technology program will develop the skills and knowledge needed to pursue a career in a wide range of fields including consumer (personal computers, video gaming, radio and television), mobile (car audio & video, navigation, security), medical (biomedical, clinical), Industrial (manufacturing) and telecommunications (cellular, telephony, data). Students are immersed in comprehensive technical and hands-on training environment where they learn about electronics by constructing real-world projects including personal computers, amplifiers, speakers, digital clocks, computer networks and robots. They also learn to use multi-meters, oscilloscopes, logic probes and other test equipment to troubleshoot and repair electronic devices. In addition to electronics and computer skills, other "in demand" skills including the development of a good work ethic, time management, punctuality, interpersonal and communication skills are stressed.
2-Year Course

Engineering and Robotics
Students learn how things work and build real mechanisms and component formulated from their own ideas to fulfill a need or concept Students explore many areas of robotics manufacturing and engineering design using stat-of-the-art computers, software, modeling, and prototyping.

Fashion Design and Merchandising 1&2
This two-year program focuses on the world of fashion! Students will study the fashion industry discovering the steps necessary for a design to turn into a garment for sale at a retail store. Students will use state-of-the-art computer software, sewing machines and sergers to create their own designs. The curriculum includes units of study in: fabric, color, design, sewing, computer applications, and retail management. Adobe Photoshop and Illustrator will be used to enhance fashion photos and create design drawings. The Fashion Design and Merchandising program will provide students with the necessary skills and knowledge to gain entry level employment or further their education in the design, manufacturing and merchandising of garments and accessories.
2-Year Course

Health Careers: 1&2
Intro to Nursing – option A
Health Technology – option B
This program is designed to help students explore and deepen their knowledge of careers in healthcare. Students learn the importance of health and wellness promotion as an integral element of any health related career. The study of medical terminology and the human body in health and disease add insight for the student pursuing any medical / health career. The core curriculum provides basic skills, knowledge, and attitudes common to present and emerging health careers. Units of study in the first year of this program form the basic foundation for more specialized study in health technology or introduction to nursing in the second year.
2-Year Course

Legal Academy: New Visions
The New Visions Legal Academy allows highly motivated, academically strong, college-bound seniors the opportunity to work on site with law-related professionals while earning 4 hours of high school credit in government, economics, criminal justice and internship field experience. For 20 out of 40 weeks, students work on-site with law-related career professionals from the courts, law enforcement and legal support services. While in class, students work independently and cooperatively on projects grounded in New York State Learning Standards on topics ranging from community service to free enterprise. Additional projects include the development of a public policy action plan, career portfolio, and a written resume.
1-Year Course

Nail Specialty
Students can apply for a NYS professional license in Nail Specialty and Waxing immediately upon graduating from this one-year program.

Plumbing, Heating and Air Conditioning
This is a lucrative and high demand trade. In this program, students will learn the fundamentals of residential and light commercial plumbing.

Sports Science Careers
Students turn their love of health and fitness into a career in one of the fastest growing industries in the country with careers in physical therapy, sports medicine, and personal training.

Video Production and Recording Arts
This program is for creative students, who love video, film, sound and music. While in the program, students learn to create and produce original films and music in our state-of-the-art lab.

Web Technologies & Game Programming 1&2
Web Technology and Game Programming is a two-year program for students interested in computer gaming and Web design. The program will introduce and fine-tune students' skills and abilities by preparing them to create Web pages from scratch using source code. This will lead to the development of high-end multimedia interactive sites. Students will also learn basic to advanced programming languages to coincide with Web development. Students will learn how to design and create games for Windows as part of the course. The variety of languages learned and the concentration on scripting will

benefit and engage both the novice and more advanced learner.
2-Year Course

Welding – Two-Year Program 1&2

Students will acquire knowledge and skills in metal cutting and joining techniques. Instruction is given in methods of measurement, layout, equipment setup, and operation. Students will become familiar with the tools and equipment of the metal fabrication industry, including: blue print reading, oxyacetylene and plasma cutting, brazing, shielded metal arc welding, gas metal arc welding, flux core arc welding, and gas tungsten arc welding of ferrous and non-ferrous metals. Essential shop mathematics and English are taught throughout the course, which align with the New York State Learning Standards. Instructors are: AWS (American Welding Society certified welding inspectors and educators who follow the strict guidelines of the AWS. Students completing the course will have created a career portfolio and have obtained the skills needed to acquire a minimum entry-level position in the welding and fabrication field.
2-Year Course – 3.75 Units per year

Zoo Wildlife and Conservation Careers

This is a new program for honors-level seniors. Students in this program consider the 23-acre Buffalo Zoo their home and explore the many career possibilities in animal car, wildlife conservation, and zoo operations.

PHYSICAL EDUCATION

The Physical Education Program provides a variety of activities that encourage the development of athletic ability, interests, skills and knowledge that will enrich the lives of students during and after high school. Participation in team and individual activities is encouraged, and the development of skills and knowledge related to lifetime leisure sports is emphasized in this program. All units taught are aligned to NYS and National Physical Education Standards. Satisfactory completion of physical education for four years (the equivalent of ½ credit per year) is required for graduation.

Medicals

If a student is excused medically from Physical Education for a period over 2 weeks, the student will be required to do alternative work in order to earn credit for Physical Education.
Any absences due to medical reasons that last for less than 2 weeks require a make up for credit. Make ups are held Mon.-Thurs. after school from (2:55-3:25).

SCIENCE

Course	Credit	Length (wks)	Exam
Earth Science	1 unit	40	Regents
Earth Science Honors	1 unit	40	Regents
Living Environment	1 unit	40	Regents
Living Environment Honors	1 unit	40	Regents
AP Biology	1 unit	40	AP
IB Biology	2 units	80	IB
Consumer Chemistry 1+2	1 unit	40	local
Chemistry	1 unit	40	Regents
Chemistry Honors	1 unit	40	Regents
AP Chemistry	1 unit	40	AP
AP Physics	1 unit	40	AP
IB Physics	2 units	80	IB
Physics	1 unit	40	Regents
Oceanography	1/2 unit	20	local
Astronomy	1/2 unit	20	local
Human Anatomy & Physiology 1+2	1 unit	40	local
Environmental Issues 1+2	1 unit	40	local
IB Environmental Systems	2 units	80	IB

A knowledge of science is essential to all students. As consumers and workers in science-related areas, the courses offered will aid students in their understanding of this ever changing and increasingly complex world. Programs provide basic information to students at their individual levels of understanding. Students can choose courses that stress basic skills and understandings or others that stress college-level material and concepts.

All courses include demonstrations, laboratory work, and classroom discussion. In Regents science classes, students are scheduled to attend a separate laboratory session that meets one day out of a six-day cycle. Students in Regents courses must meet specific lab requirements in order to be eligible for taking state Regents examinations.

Science Laboratory Policy

The following policies reflect New York State Regents Examination Policy commensurate with full-year Regents Science Courses which end in New York State Regents Exams: Earth Science, Living Environment, Chemistry, and Physics. These policies do not apply for district (local) courses.

1. Students must successfully complete 1200 minutes of laboratory time to sit for a Regents Science examination. These 1200 minutes may be accumulated from the last 2 semesters. A student may take the regents exam at the end of the semester in which he/she completes the 1200 minutes.

2. Written lab reports must be completed and submitted to the instructor no later than one week prior to the administration of the laboratory component (Part D) of the finals exam. (presently given in Earth Science). If no laboratory component is administered, all written reports must be completed and submitted to the instructor no later than one week prior to the administration of the Regents Final Exam.
   At the conclusion of each academic quarter, the instructor will communicate lab progress through the report card lab grade. Laboratory make-up is at the discretion of the instructor.

3. Students repeating a Regents Science course due to academic failure and/or not having enough lab minutes will be enrolled the following academic year in both the science course and its required lab component.

***Special notation for all science courses with a separate lab class**

No student will be admitted into lab if they are 10 minutes or more late to class. This rule applies to early morning lab, after school lab as well as labs scheduled during the day.

COURSE DESCRIPTIONS

Physical Setting: Earth Science

This is an investigation course. It involves the study of the earth, present and past, and the forces that influence changes in it. Following a study of observation and measurement techniques, students concentrate on the study of earth's motion and place in the solar system, atmospheric and energy changes, and a general study of rocks and minerals. Students are required to complete 1200 minutes of laboratory work with successful written reports. A student not completing the laboratory requirement is ineligible to take the Earth Science Regents examination. The final exam grade is composed of the Lab Practical score and the written exam score.
Prerequisite: Passing Final Grade in Living Environment Regents
40 Weeks/5 Meetings per Week + Laboratory Period – 1 Unit
Examination: Regents

Physical Setting: Earth Science (Honors)

This course is the same as Earth Science Regents. However, topics are investigated in depth and some additional topics are required.
Prerequisite: Students must have scored an 85% or above on their NYS Living Environment Exam and the course.
Grade Levels: 9, 10, 11, 12
40 Weeks/5 Meetings Per Week Plus Lab.– 1 Unit
Examination: Regents

Earth Science Labs

1. 1200 minutes of successful lab time must be accumulated one week before the Earth Science Lab Practical.

2. Lab Practical scores may not be transferred from one exam attempt to another. Students challenging or retaking the Earth Science Exam must retake the lab practical.

Living Environment

Included in this offering are instruction in laboratory techniques, study of the structural, functional, and biochemical aspects of cells; plant and animal physiology with an emphasis on the human body; genetics and brief survey of the plant and animal kingdoms and organic evolution and ecology. 1200 minutes of laboratory work with successfully written reports are required which includes four NY State mandated labs. A student not completing the laboratory requirement is ineligible to take the Living Environment examination.
Prerequisites: completion of 8th grade Science and /or Honors Earth Science
Grade Levels: 9, 10, 11, 12
40 Weeks/5 Meetings per Week plus Laboratory Period – 1 Unit
Examination: Regents

Living Environment (Honors)

This course is intended for above-average 9th grade students. Independence and personal responsibility for learning will be stressed. Students enrolling in Living Environment Honors should be self-directed and capable of handling more rigorous academic responsibilities. Living Environment Honors is a comprehensive course in life science. It is designed to give students a broad, yet in-depth, background in a diversity of biological concepts. In addition to the living environment curriculum, there is an emphasis on the scientific method and enrichment topics in molecular genetics, biotechnology, and bioethics. Special emphasis is placed on developing students' laboratory skills and communication skills in science. Students are required to participate in laboratory activities leading to successful completion of the Regents laboratory requirement by completing at least 1200 minutes of laboratory work for the course.
Prerequisites: Minimal Final Grade of 85% in Science

Advanced Placement Biology*

Advanced Placement Biology is a college-level course designed to provide students with the opportunity to receive college credit for work done in high school. It is a challenging and demanding course that is presented through college-style lectures, discussion seminars, and selected readings. Topics covered include: biochemistry, cell biology, genetics, evolution, botany, human physiology, animal behavior, and ecology. Students must complete twelve college style laboratory experiences that were developed as a part of the Advanced Placement program. In addition, each student must complete a post AP project. The course is recommended for superior biology students who plan to pursue a career in biology or a biology related field. College policies for granting a credit for taking Advanced Placement Biology vary, but a grade of 4 or 5 (on a scale of 1-5) on the Advanced Placement Examination is usually accepted by colleges in lieu of the introductory course in Biology or counted as an elective course.
Prerequisite: Students are required to complete a NYS Living Environment Course. It is **highly recommended** that students have taken Living Environment Honors. Students must have **completed or be currently enrolled** in Chemistry R. Students who enroll in Advanced Placement Biology are strongly encouraged to complete Physics R before graduation to ensure an adequate background for college level work in Science.
*Complete required summer assignment prior to school year. Check school website for details.

IB Biology

(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Biology is a Group 4 option for the IB Diploma Program. It consists of the study of five core topics: cells, the chemistry of life, genetics, ecology and evolution, and human health and physiology; plus, additional study in HL (higher level) in nucleic acids and proteins, cell respiration and photosynthesis, plant science, neurobiology, immunology, and origin of life on Earth. Also strongly incorporate nature of science and theory of knowledge. Living Environment is recommended for students choosing Biology ***HL.***
Pre-requisite: IB students only
80 weeks
IB examinations and assessments

Consumer Chemistry 1+2

This is a course designed to acquaint the student with basic chemical laws without the emphasis on abstract theoretical or mathematics concepts. Units on applied chemistry will show students how chemistry is applied in their lives.

This course is recommended for students who are interested in the following technical careers: automotive, environmental, and health fields such as dental lab, respiratory therapy, and medical lab.
*Can be used for the third year of science credit.
Grade Levels: 11, 12
40 Weeks/5 Meetings per Week – 1 Unit
Examination: Local

Physical Setting: Chemistry

This course presents a modern view of chemistry by emphasizing unifying principles and related facts. These are basic to man's understanding of his environment and will prepare a student to understand better the world around him. A strong mathematical background is essential for the understanding of basic chemical principals. Students are required to complete 1200 minutes of laboratory work with successful written reports. A student not completing the laboratory requirement will be ineligible to take the Chemistry Regents examination. Can be used for the third year of science credit.
Prerequisites: Passing grade on Earth Science & Living Environment Exams, & a 75% On Algebra.
Recommend enrollment in Algebra II.
Grade Levels: 10,11, 12
40 Weeks/5 Meetings per Week + Laboratory Period – 1 Unit
Examination: Regents

Chemistry (Honors)

This course is offered to students who have demonstrated high achievement in both Science and Math. It includes all topics covered by Regents Chemistry. In addition, a mathematical approach, using the factor-label method, will be studied. Topics specific to the Honors level will include VESPR and molecular geometry, periodic trends based on atomic structure, specific heat, the ideal gas equation, experimental methods of molecular mass determination, limiting ractants, phase diagrams, reaction mechanisms, equilibrium and its relationship to pH, nonstandard conditions in electrochemistry, and Gibbs free energy calculations. Students will do supplementary in-class labs to enhance their chemistry background. Can be used for the third year of science credit. Students are required to complete

1200 minutes of laboratory work with successful written reports.
Prerequisites: Teacher recommendation, 85% or higher final average in Algebra 1, and Living Environment and a passing score on BOTH the Algebra 1 and Geometry Regents exams.
Examination: Algebra II Regents exam
40 Weeks/1 Unit

Advanced Placement Chemistry*

This course is offered to students who desire a broad background prior to college chemistry. The course emphasizes mathematics and rational thought. The course will prepare the student for the Advanced Placement Examination which may lead to college credit. This course should be considered by any student interested in medicine, dentistry, engineering, or any career in science. Non-science majors can use the AP program to satisfy the science requirement which many colleges demand for graduation. This course has been approved by the State Education Department for use as a fifth-unit of science for the Regents Diploma provided that the student has successfully completed the Regents sciences Earth Science and Living Environment. This course may be taken the same year as Physics. Can be used for the third year of science credit. The AP Chem. Labs are comparable to college chemistry labs.
Prerequisite: Minimum grade of 85% on Chemistry Regents exam, and 90% overall average in Algebra II
Grade Level: 11, 12
40 Weeks/5 Meetings per Week plus Lab Period – 1 Unit
Examination: Advanced Placement
*Complete required summer assignment prior to school year. Check school website for details.

Physical Setting: Physics *

This course involves a thorough study of the physical forces that affect mankind including such topics as: mechanics and heat, wave theory, electricity and magnetism, atomic energy, and nuclear physics, 1200 minutes of laboratory work with successfully written reports are required. A student not completing the laboratory requirement will be barred from the Physics Regents Examination.
*Can be used for the third year of science credit
Prerequisites: Passing grade on Earth Science & Biology Exams, a 75% On Algebra 1 & Geometry Exam and Enrollment in Algebra II. It is suggested that a student have a minimum of 75% on the Algebra II or Advanced Algebra exam.
Grade Levels: 11, 12
40 Weeks/5 Meetings per week plus Lab Period-1 Unit

Advanced Placement Physics*

This course is designed for students who are contemplating science as a major field of study in college, and will prepare students for the Advanced Placement-C examination (mechanics). Strong emphasis is placed on solving a variety of challenging problems in statics, kinematics, linear and rotational dynamics, gravitation, work, and energy. Some problems require knowledge of calculus, but much of the required calculus is covered in class. Students will have the opportunity to perform virtual simulations of problems and gain hands-on experience with advanced laboratory exercises.
*Can be used for the third year of science credit.
Prerequisite: Concurrent enrollment in, or successful completion of (final course grade greater than 85%): Algebra II, Pre-calculus.
Grade Level: 12
40 Weeks/5 Meetings per Week Plus 1 Lab Period – 1 Unit
Examination: Advanced Placement-C and Local

IB Physics

(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Physics is a Group 4 option for the IB Diploma Program. It is designed for accelerated math students, introducing them to the laws of physics, the experimental skills required in physics, and the social and historical aspects of physics as an evolving body of human knowledge about nature. The core of Physics SL consists of study in six topics: physics and physical measurement, mechanics, thermal physics, waves, electricity and magnetism, and atomic and nuclear physics.
Note: Physics SL may also be chosen for Group 6 (Arts and Electives) if the student's Group 4 choice is Biology HL.
Pre-requisite: Algebra II; IB students only
80 weeks
IB examination and assessments

Oceanography

The student will develop a fundamental understanding of how the oceans work. The course will include components of the ocean; the sea floor, physical components, endangered species and life forms-especially the hundreds of new species discovered in the deep ocean realm. Because humans are impacting ocean systems, it will be important to understand not only how the oceans operate, but also how the oceans interact with the atmosphere, biosphere and hydrosphere. This course can be used as a third year of science.
Prerequisites: Living Environment & Algebra
Grade: 11, 12
**20 Weeks/5 Meetings per Week plus Lab Period – ½ Unit*
Examination: Local
**Offered In the Spring*

Astronomy

Beginning with the stars, constellations and the visible sky, students will explore the universe that can be described by a small set of physical laws they can easily comprehend. An in-depth look at our history of rocketry and our latest endeavor, the International Space station will be some of the material covered in this class. The course will offer a grand tour from Earth to the center of our Milky Way galaxy to the depth of a black hole. This course can be used as a third year of science.
Prerequisites: Earth Science, Algebra
Grade Level: 11, 12
20 Weeks/5 Meetings per Week plus Lab Period – ½ Unit
Examination: Local
**Offered In the Fall*

Human Anatomy & Physiology 1+2

This rigorous course represents a two-semester study of the topics involved in Human Anatomy and Physiology for highly motivated students. The major emphasis of study is structures and functions. The molecular-cellular approach early in the course serves as the basis for body-system study through the major portion of the year. The lab portion of the course involves dissections (cats, cow eyes, sheep hearts, sheep brains, and animal kidneys), histological slides, and human models of various systems, the skeletal system, and all other organ systems of the human body. Lecture will also include an emphasis on wellness and disease prevention. Students interested in pursuit of health or medically related field (physical therapy, occupational therapy, nursing, premed or pre-dental) in college are encouraged to take this course. This course can be used for the third year of science credit.
Prerequisites: Overall average in Living Environment at 85% or higher.
Grade Level: 11, 12
40 Weeks/5 Meetings per Week plus Lab Period -1 Unit
Examination: Local

Environmental Issues 1+2

Environmental problems such as acid rain, nuclear waste, and air and water pollution travel along interconnecting paths and show no consideration for boundaries to cities, states, countries, and outer space. Students need to be aware of the concerns of local, national, and global people and become proactive in resolving these environmental issues. Such global issues include dumping wastes into oceans, deforestation, overpopulation and global warming, national concerns about water and air quality, wetland management, species protection and recycling. Local debates in the community focus on landfill sites, power plants, manufacturing industries, road/highway maintenance, and public transportation.

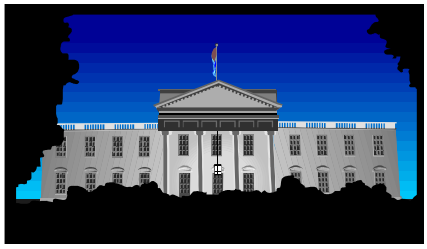
This course is designed to provide an extraordinary opportunity to further science knowledge. While providing appropriate teaching strategies to meet the individual needs of diverse students, students will learn how to make connections between science technology and society. The course work is focused on relating science to environmental concerns. Successful completion of the course will enable students to become more informed citizens. This course cannot be used for the advanced Regents diploma. **This course can be used for a third year of science credit.**
Prerequisites: Living Environment
40 Weeks/5 Meetings per Week + 1200 Minutes of In-Class Labs - 1 Unit applied toward science (or technology) will be earned after successful completion of the course.
Examination: Local
Grade Level: 11, 12

IB Environmental Systems and Societies

(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).

IB ES&S is a Group 4 option for the IB Diploma Program. It is a transdisciplinary subject designed to provide students with an understanding of the interrelationships between environmental systems and societies, enabling them to adopt an informed response to the wide range of environmental issues. Students examine the significance of choices' and decisions' impact on the environment and society by evaluating the scientific, ethical, and socio-political aspects of those issues. The core of Environmental Systems and Societies consists of study in seven topics: systems and models; human population; carrying capacity and resource use; conservation and biodiversity; pollution management; climate change; and environmental value systems.
Note: ES&S may also be chosen for Group 6 (Arts and Electives) if the student's Group 4 choice is Biology HL.
Pre-requisite: IB students only
80 weeks
IB examination and assessments

SOCIAL STUDIES



Students are required to earn four credits in social studies to graduate. These include Global History & Geography 9, Global History & Geography 10, U. S. History & Government, Economics, and Participation in Government. Required tests include passing the Regents Exam in Global History & Geography (after 10th grade) and U. S. History & Government.

LEARNING STANDARDS FOR SOCIAL STUDIES

1. *History of the United States & New York*
Students will use a variety of intellectual skills to demonstrate their understanding of the major ideas, eras, themes, developments, and turning points in the history of the United States and New York.

2. *World History*
Students will use a variety of intellectual skills to demonstrate their understanding of the major ideas, eras, themes, developments and turning points in world history, and examine the broad sweep of history from a variety of perspectives.

3. *Geography*
Students will use a variety of intellectual skills to demonstrate their understanding of geography of the interdependent world in which we live – local, national, and global – including the distribution of people, places, and environments over the Earth's surface.

4. *Economics*
Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and non-market mechanism.

5. *Civics, Citizenship, & Government*
Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental system of the United States and other nations; the United States Constitution; the basic civic values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, including avenues of participation.

COURSE DESCRIPTIONS

Global History & Geography 9
Global History and Geography is designed to meet the State syllabus that requires a Regents exam to be passed following completion of Global History and Geography 10. This course is taught in a chronological format and covers ancient times 1750.
Grade Level: 9
40 Weeks/5 Meetings Per Week – 1 Unit
Offering: Full Year
Reading Level: Regents
Examination: Local

Global History & Geography 9 (Honors)
In addition to the course of study described for Global History and Geography 9, the student will be assigned outside readings and WILL be required to write additional papers.
Prerequisites: A Final average of at least a 85% in Grade 8 Social Studies; consistent attendance, and high level reading comprehension, analytical thinking ability; teacher recommendation, and the completion of a summer reading program are mandatory. The student MUST PASS, with a 65%, the summer reading test.
Grade level: 9
40Weeks/5 Meetings per Week – 1 Unit
Offering: Full year
Reading Level: High
Examination: Local

Global History & Geography 10
This course is designed to continue the work begun in Global History & Geography 9. Its emphasis is on the modern era. The course begins at the Age of Revolution and is organized chronologically. The course ends with a discussion of current events.
Grade Level: 10
40 Weeks/5 Meetings per Week – 1 Unit
Offering: Full Year
Reading Level: Mixed
Examination: Regents

Global History & Geography 10 (Honors)
In addition to the course of study described for Global History and Geography 10, the student will be assigned outside readings and WILL be required to write additional papers.
Prerequisites: A Final average of at least an 85% in Global History and Geography 9; consistent attendance, and high level reading comprehension, analytical thinking ability; teacher recommendation, and the completion of a summer reading program are mandatory. The student MUST PASS, with a 65%, the summer reading assessment.
Grade level: 10
40Weeks/5 Meetings per Week – 1 Unit
Offering: Full year
Reading Level: High
Examination: Regents

U. S. History & Government 11
This course is designed to meet the requirements of the revised New York State syllabus in U. S. History & Government. A Regents exam in U. S. History & Government will be given following completion of this course. Current affairs and their relationship to concepts in U. S. History are included with an emphasis on sharpening the basic skills of reading comprehension, writing, graph interpretation, and map reading.
Prerequisite: Global Studies 10
Grade Level: 11
40 Weeks/5 Meetings per Week – 1 Unit
Offering: Full Year
Reading Level: Mixed
Examination: Regents

U.S. History & Government (Honors)
In addition to the course of study described for U.S. History & Government, the student will be assigned outside readings and WILL be required to write additional papers.
Prerequisites: A Final average of at least a 85% in Global History and Geography 10; consistent attendance, and high level reading comprehension, analytical thinking ability; teacher recommendation, and the completion of a summer reading program are mandatory. The student MUST PASS, with a 65%, the summer reading test.
Grade level: 11
40Weeks/5 Meetings per Week – 1 Unit
Offering: Full year
Reading Level: High
Examination: Regents

Advanced Placement American History
This is a college level course in American History designed to prepare students for the examination given in May for college AP credit. A student who successfully completes this course can earn credit in hundreds of colleges and universities. The course has a heavy emphasis on lecture and note taking, college level reading, and

college level papers. Successful completion of this course may release students from their college freshman American History requirements. This course may be taken in place of U. S. History & Government requirement providing the student takes the Regents examination and passes it. If the course is taken in addition to the U. S. History & Government course, it may be used as a fifth unit of credit toward a Social Studies sequence.

Prerequisites: A final grade of 90 or better in Global Studies 10 or special permission of the instructor. It is strongly recommended that the student's writing skills be on an Honors level for this course. Completion of a summer reading program is also required.
Grade Level: 11, 12
40 Weeks/5 Meetings per Week – 1 Unit
Offering: Full Year
Examination: AP Exam, Regents

IB History (grades 11 and 12)

(Note: For more information about IB, use the "international Baccalaureate" link on the KW homepage. "Shortcuts" list).
The focus of the first year is History of the Americas, focusing not only on the United States, but also Canada, the Caribbean, South America, and parts of Latin America. The IB curriculum offers possible 22 topics for inclusion in the two-year course. Students study six of these topics in depth through lecture, through lecture, discussions, original research, and through analysis of a variety of primary and secondary sources.

IB 20th Century History is the second year of History (HL). Unlike a typical survey of 20th century history, students study four topics in depth, such as the causes, practices and effects of war; the rise and rule of single party states; and the Cold War, 1945-1995. In addition to these broader topics, subtopics are chosen for document-based study.
Prerequisite: IB students only
80 weeks
IB examination and assessments

Economics & Economic Decision-Making

This course will include the basic economic concepts and understandings which all persons will need to function effectively and intelligently as citizens and participants in the economy of the United States and the world. The course will emphasize a rational decision-making process that can be applied to all economic decisions. It will meet the requirements of the New York State syllabus in Economics and Economic Decision Making.
Prerequisites: Social Studies 9, 10, 11
Grade Level: 12 – Required
20 Weeks/5 Meetings per Week – ½ Unit
Examination: Local

Advanced Placement Microeconomics

This is a college level course in microeconomics that fulfills two objectives. First, it satisfies the twenty-week economics requirements for all seniors. The local Regents level final exam concludes the course. Second, it prepares the students for the AP exam in Economics in May that qualifies the student or college credit at many universities. AP Economics emphasizes basic microeconomic concepts and understandings. Also included are compatible microeconomic and international trade theories as required by New York State.
Prerequisites: Social Studies 9, 10, 11; Demonstrates strong ability to read and analyze data. Student must have at least an 85% average in math and social studies 11. Also consistent attendance & above average ability in Social Studies reading, interpretation, writing, research, & reporting & teacher recommendation.
Grade Level: 12
40 Weeks; meets every other day
Examination: Advanced Placement & Local exam

IB Economics

(Note: For more information about IB, use the "International Baccalaureate" link on the KW homepage "Shortcuts" list).
IB Economics is a Group 6 (Arts and Electives) option for the IB Diploma Program. It is designed to develop an ability to apply tools of economic analysis to situations and data, and to explain the findings clearly. This course examines how individuals and societies organize themselves in the pursuit of economic objectives. It fosters an ability to evaluate economic theories, concepts, situations, and data in a way that is rational and unprejudiced. International perspectives feature a tolerance and understanding of the diversity of economic realities in which individuals and societies operate. The four parts of the syllabus cover both macro and micro economics: resource allocation, national income analysis, international trade, and economic growth and development. This IB course is completed in one year, allowing IB students to choose an additional course in senior year if desired.
Grade level: 11 and 12, IB students only
40 weeks
IB examination and assessments

Participation In Government

This course will emphasize the interaction between citizens and government at all levels – local, state, and federal. It will encourage students to understand and participate in the democratic process. To this end, each student will be required to perform fifteen (15) hours of community service during the semester, attend 3 policy-making meetings, as well as write a research paper focusing on government involvement in a particular issue. It will meet the requirements of the New York State syllabus in Participation In Government.
Prerequisites: Social Studies 9, 10, 11
Grade level: 12 – Required
20 Weeks/5 Meetings per Week – ½ Unit
Examination: Local

Advanced Placement American Government & Politics

This course is an introductory college level course in American Government that is designed to give students a critical perspective on government and politics in the United States. Major topics include constitutional foundations of government, institutions and the policy making process, citizen participation, the role of political parties, interest groups, and civil rights and liberties.
Prerequisites: Demonstrates strong ability to read and write across content areas. Student must have at least an 85% average in English and Social Studies 11; successful completion of summer reading program.
Grade Level: 12
40 Weeks; meets every other day
Exam: Advanced Placement & Local

Advanced Placement European History

Advanced European History is a college-level course designed to explore the development of Western Civilization in the areas of political, economic, social/cultural and intellectual thought. The focus of the course is on European History from 1450 A.D. to the present. Upon successful completion of the course the student may

receive advanced college credit from even the best colleges and universities in the country. This course may be used as a fifth unit of credit toward a Social Studies Sequence. Join the 90,000 plus other students who embark upon the journey to investigate how the modern western world evolved. All 10th grade students, including IB students, taking this course must complete a summer reading assignment which will be distributed in June and available online over the summer. Students will be required to take a test on this assignment in September.
Prerequisites: Final average of at least 85% in previous Social Studies coursework, consistent attendance & above average ability in Social Studies reading, interpretation, writing, research, & reporting & teacher recommendation.
Grade Level: 10, 11, 12
40 Weeks/5 Meetings per Week – 1 Unit
Offering: Full Year
Exam: AP Exam In European History, Local

20-WEEK ELECTIVES COURSES

Cops, Courts & The Constitution: Law in America
We are living in a time when there is great concern about crime, criminals and punishment. This course combines elements of criminology, sociology, criminal law and constitutional law as they pertain to the American criminal justice system. Topics explored in this course include: types of crime, defenses to crime (including insanity), criminal behavior, police, courts, prisons and the death penalty. Throughout the course, an emphasis is placed on the decisions of the **U.S.** Supreme Court and how they affect the individual and the legal system. **A great elective to take with US History as it covers additional material that is tested on the US Regents exam**.
20 Weeks/5 meetings per week - 1/2 unit
Marking: Local Final Examination, Class Involvement, Tests/Quizzes

Psychology
Psychology is the study of human behavior and mental processes. This survey course will introduce the student to fundamental aspects of the field of psychology. Topics covered include intelligence, personality development, motivation, perception, learning, and human development. Major psychological experiments and theories are incorporated throughout the course. A required independent study project allows the student to deeply investigate a specific topic.
20 Weeks/5 Meetings per Week – ½ Unit
Marking: Local Examination, Performance, both oral and written presentation.

Investigating the Holocaust
This course is designed to achieve an understanding of one of the major catastrophes of mankind. Through a variety of primary sources including Hitler's *Mein Kampf*, Nazi propaganda films, survivor testimonies, and Nazi documents we will attempt to understand the forces in play that caused the Holocaust. Topics for the course include: Roots of the Holocaust including a study of racism, prejudice, and other genocides in world history, Judaism and Jewish life, Rise of Fascism and the National Socialists (Nazis), Hitler and His Henchmen, Formation of Ghettos and Camps, Final Solution, World War II, Nuremberg Trials, and Aftermath. A variety of sources including music, art, photographs, and films (*Uprising, Schindler's List*) will be used to discover the situation in Germany and the rest of Europe from 1919-1946. **A great elective to take with Global 10 as it covers additional material that is tested on the Global Regents exam**.
20 Weeks/5 Meetings per Week – ½ Unit
Marking: Written Examination, Class Work, Projects

The History of World War II
F.D.R., Hitler, "Ike", McArthur, "Monty", Patton, Stalin, "Tojo", and 'Sir' Winston: Men from the past, born in foreign lands, brought up in different cultures and ideologies, yet fate intervened and brought these men together to participate in the deadliest global conflict ever - World War II. This college style course will begin with the outcome of the First World War and conclude with the seeds of the 'Cold War'. Topics include: Prelude to War, Blitzkrieg, Operations Barbarossa and Sea-lion, the Desert War, the heroes of Stalingrad, Japanese and Nazi rule, Great Secrets of the War, the Pacific Campaign, 'D-Day', the 'Bulge', Island Hopping, and the beginning of the Atomic Age. Using audio, film, models, multimedia, primary sources, and photography, students will learn why World War II forever changed the history of mankind. **A great elective to take with Global 10 as it covers additional material that is tested on the Global Regents exam**.
20 Weeks/5 Meetings per Week – ½ Unit
Marking: Battle Plans, Final Independent Project, Participation, Personal Journals and Unit Tests.

Sociology
Sociology is the study of human group behavior. This course will introduce the student to the basic concepts of sociology. Topics will include: the methods of sociology, the nature, meaning, and effect of culture, the relationship between culture and personality, the process of socialization – self concepts, roles, the nature of social deviation, social class and social mobility, social and cultural change.
20 Weeks/5 Meetings per Week – ½ Unit
Marking: Written Examination

The 60's & 70's
Journey back to the time of JFK, Martin Luther King, the Vietnam War, Hippies and Watergate. This course is designed to explore the social and political movements of the 1960's and the 1970's, and how they changed the fabric of American society. We will begin our exploration of this tumultuous time period and the events that have shaped us with a brief look at the 1950's post World War II America. The 1960's are characterized as a decade of rebellion and reaction to the social and political conditions of the 1950's. As we explore this time in American history we will connect it to today's cultural movements and political struggles.
This fascinating time period was so recent that we have access to films, music and literature. We will use all of these materials during the course. **A great elective to take with US History as it covers additional material that is tested on the US Regents exam**.
Prerequisites: Students Must Have Passed Regents Global Studies
20 Weeks/5 Meetings per Week
Marking: Journal entries, tests, classroom participation and Final Examination.

The World Today
The purpose of this course is for students to become familiar with local, national and international issues. No formal text will be used in this class. Information will be gathered from newspapers, magazines, various news shows and websites to inform students of the current issues of society. One of the goals of this class is to learn

how to analyze the issues. We must be able to understand the reported news, to seek out reliable and verifiable sources, and to be alert to bias and different forms of persuasion. We must constantly question as we investigate in order to make informed decisions. Furthermore, students will learn to communicate and express opinions on issues through civil discourse. Assessments will be varied and authentic in nature. Tests, quizzes, homework and projects are examples.

Grades: 10, 11 and 12 20 weeks/5 meetings per week - ½ unit
Exam: Local Offering: Both semesters
Prerequisite: 9th Grade Global History Reading Level: Mixed

SPECIAL EDUCATION

Special Education classes are available to students who have been identified by the District Committee on Special Education (C.S.E.) as having an educational disability. These disabilities include: blindness, deafness, emotional disabilities, learning disabilities, mental retardation and physical disabilities. Special education instruction or services may include special education courses, tutoring, or consultant services. Students are placed in the least restrictive educational program available in which the student can succeed. Through specialized instruction using a variety of instructional strategies, students are taught both academics and communication skills necessary to become independent and contributing members of society. An Individualized Education Program (I.E.P.) is developed for each student with special needs with appropriate short and long-term goals.

The cooperation of parents is important for the success of students in these programs. Please contact your child's school counselor if you feel that he or she should be evaluated by the Committee on Special Education for special educational services.

Resource Room

Grades 8, 9, 10, 11, 12
Prerequisites: Recommended By the Committee on Special Education
40 Weeks/5 Meetings per Week
Offering: Full Year
Credit: None
Exam: Demonstrated Growth on Achievement Tests; Required NYS Regents

A variety of subjects are taught based on individual needs and the results of diagnostic testing. Each student's I.E.P. outlines individual goals and objectives to be achieved. Reading, writing, spelling, math, and study skills are emphasized so that meaningful learning may take place in mainstream classes. Specific emphasis will be placed on human relations, thinking skills, self-advocacy, transition planning, and group interaction while tutorial assistance in some content area courses is available. There is ongoing contact with all mainstream teachers so individual support may be offered to the students. Parental involvement is encouraged with studying, homework, and test preparation in order for students to achieve. The parent-school communication is a key component for success in this program.

The program can be taken for one to four years, dependent on the needs of the student, the recommendation of the instructor, and approval of the CSE.

Regents Co-Taught Program

Grade: 8, 9, 10, 11
40 Weeks/5 Meetings per Week
Prerequisites: Recommended by the Committee on Special Education

Classes are co-taught by a Regular Education Teacher and a Special Education Teacher in All the core content area subjects: English, Math, Science and Social Studies at all grade levels. In addition, some students in the co-taught program have a period of Resource Room to assist students with their daily assignments and skill development.

Exam: Demonstrated Growth on Achievement Tests, Required NYS Regents.

15:1 Self-Contained Co-Taught Classes

Grade 8 (Living Environment only), 9, 10, 11, 12
40 Weeks/5 Meetings per Week
Offering: Full Year – 1 Unit per Year

Prerequisites: Recommended by the Committee on Special Education Classes are co-taught by a Regular Education Teacher and a Special Education Teacher in All the core content area subjects: English, Math, Science and Social Studies at all grade levels.

In addition, some students in the 15:1 Self-contained co-taught program have a period of Resource Room to assist students with their daily assignments and skill development.

A variety of classroom strategies will be used to ensure that the students learn the high school curriculum as well as meet the goals and objectives of their IEPS.

Exam: Demonstrated Growth on Achievement Tests, Required NYS Regents.

8:1:1 Program

Grade: 8, 9, 10, 11, 12
40 Weeks/5 Meetings per Week
Offering: Full Year – 1 Unit per Year
Prerequisites: Recommended by the Committee on Special Education

The 8:1+A is a special program provided by the Kenmore-Tonawanda School District offering high school students with emotional and behavioral disabilities an alternative classroom setting in which an emphasis is placed on addressing behavioral issues as well as providing academic instruction. This program is designed to meet the needs of students who are classified by the Committee on Special Education as emotionally disturbed and/or learning disabled with significant social and behavioral deficits that prevent them from being successful in a general education classroom. The behavior management program is first and foremost in the 8:1+A setting. Weekly counseling sessions with a school psychologist are also an important component for our students. Core academics are addressed in a self-contained setting. These classes are taught by a grade level Special Education Teacher and are aligned with the New York State curriculum requirements. Students in this program take part in general education electives with the support of the Special Education Teacher and a classroom Aide. A Regents or Local diploma may be earned through this program.

Exam: Demonstrated Growth on Achievement Tests,
Required NYS Regents.

Engineering/Technology

There is little doubt that rapid changes in technology impact almost every aspect of our lives. Students learning to design produce, and market ideas, solutions and products will become successful in all endeavors. Technology Education at Kenmore West includes ac-

tion-based programs for all students including future paths to college, apprenticeships, and on-the-job training. Through the wide-variety of courses available, all students have the opportunity to explore technology as an elective or choose a sequence of study to prepare for future success.

For more information, go to: **www.ktufsd.org/academies**.

Art/Music Requirement

PLTW Introduction to Engineering Design / DDP (PLTW IED/DDP) may be used to satisfy the Art/Music graduation requirement. Students not satisfying this requirement may still participate in PLTW IED/DDP as an elective.

Third Year Mathematics

The following courses may substitute for a third unit of mathematics credit:

- *PLTW Digital Electronics (PLTW DE)*
- *Computer Networking 1*

Third Year Science

PLTW Principles of Engineering (PLTW POE) may substitute for a third unit of science credit.

Regents Diploma with "Advanced Designation"

Students completing a sequence of not less than five units of credit in Technology Education are **not** required to complete the additional two units of LOTE or to pass the Regents Comprehensive Examination in that language to earn a **Regents Diploma with Advanced Designation**.

Project Lead the Way (PLTW)

Project Lead the Way courses are part of a nationally recognized pre-engineering curriculum that benefits all students, especially those interested in careers in STEMs (Science-Technology-Engineering-Mathematics). All PLTW courses offer college credit through several postsecondary institutions.

Additionally, students interested in PLTW courses may participate in the Pre-Engineering Academy CTE program and earn an additional diploma endorsement indicating career readiness for STEMS careers. Students *DO NOT* have to participate in an Academy to enroll in PLTW courses.

Go to **www.pltw.org** for additional information.

Academies (CTE Programs)

Three different Academies are available through the Technology Education department. Participating in an Academy is one of many ways students may study the technological world and prepare for future success. Technology Education Academies include:

- ✓ Computer Networking & Technology Academy
- ✓ Information Technology Academy
- ✓ Pre-Engineering Academy

See the Academies section at the beginning of this Curriculum Handbook, the Counseling Department, or a technology education teacher for further information.

Please Note:
ALL students may enroll in **ANY** Technology Education course as an **ELECTIVE**.

PLTW Introduction to Engineering Design / DDP (PLTW IED/DDP)

This design course may be used to satisfy the **Art/Music requirement** for any student. PLTW IED/DDP introduces students to the engineering design process and problem solving through the design, creation, and testing of prototypical solutions to unique problems. Throughout the class, a wide variety of open-ended activities are experienced using modern 3D modeling software and classroom machinery. This class is based on the PLTW Pre-Engineering curriculum and is centered on the design software program *Autodesk Inventor*. In addition to the variety of hands-on activities students will document their work and communicate solutions to peers and members of the professional community. This course is open to all students, but is typically taken by 9th and 10th grade students.

Note: may be taken to satisfy Art/Music requirement or as an elective.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
40 Weeks – 1 Unit
Assessment: Project Lead the Way

PLTW Computer Integrated Manufacturing (CIM)

Computers-n-Robots
The major focus of this course is to answer the questions: How are things made? What processes go into creating products? Is the process for making a water bottle the same as it is for a musical instrument? How does an assembly line work? As students find the answers to these and other questions, they learn about the past, present, and future of manufacturing. This course is built around several key concepts: computer modeling, Computer Numeric Control (CNC) equipment, computer aided manufacturing (CAM), and robotics. PLTW CIM students build on the skills and knowledge acquired in PLTW IED/DDP and move to a higher level of design visualization while creating and troubleshooting robotic systems created using Vex robotics (www.vexrobotics.com).
Prerequisite: PLTW IED/DDP
Grade Levels: 10, 11, 12
40 weeks - 1 unit
Assessment: Project Lead the Way
Reading Level: Mixed

PLTW Principles of Engineering (POE)

This survey course of engineering exposes students to some of the major concepts they'll encounter in a postsecondary science, technology, engineering, and mathematics (STEMs) courses of study. Students have an opportunity to investigate engineering and high-tech careers and to develop skills and understanding of course concepts. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Hands-on activities will be undertaken including the design and construction of: electronic power packs, solar powered vehicles, powered model vehicles, aerodynamics and aircraft flight, auto safety, and robotics and machine automation. Students interested in engineering or wishing to ex-

plore the work of a mechanical, civil, electrical, or automotive engineering will benefit from this course as well as anyone interested in wide variety of STEMs careers.
Please note: PLTW Principles of Engineering (POE) may substitute as a third unit of science credit.
Prerequisites: PLTW IED/DDP
Grade Levels: open to 10, recommended 11, 12
40 Weeks – 1 Unit
Assessment: Project Lead the Way

PLTW Computer Science & Engineering (CSE)
This course offers students an introduction to computer science, covering the College Board's Computer Science principles framework. Participants will be introduced to computation tools that foster creativity and build students' awareness of the demand for computer specialists in all professional fields. Topics include app design, graphical user interfaces, internet security protocols for commerce and social media, intelligent machines, and visualizing data. This course may be taken as an elective or as part of a PLTW and/or five unit sequence.
Prerequisites: PLTW IED/DDP recommended
Grade Levels: 10, 11, 12
40 Weeks – 1 Unit
Assessment: Project Lead the Way

PLTW Digital Electronics (DE)
Are you interested in knowing how all modern electronics work? Students in this course study electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cell phones, computers, communication systems, digital cameras, high-definition televisions, and MP3 players. The major focus of the DE course is to expose students to logic design, teamwork, communication methods, and engineering standards.
Please note: PLTW Digital Electronics (PLTW DE) may substitute as a third unit of mathematics credit.
Prerequisites: PLTW IED/DDP
Grade Levels: 11, 12
40 Weeks – 1 Unit
Assessment: Project Lead the Way

PLTW Engineering Design & Development (EDD)
This course is the final, capstone experience in the Project Lead the Way sequence of learning. In this unique design course, students work in teams to engineer and develop original solutions to valid open-ended technical problems by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel. This course is appropriate for 12th grade students.
Prerequisites: At least two PLTW courses
Grade Levels: 11, 12
40 Weeks – 1 Unit
Assessment: Project Lead the Way

Computer Aided Design (CAD)
This course is an introduction to problem solving and modeling. Students develop an understanding and application of the types, uses, and advantages of the computer aided design (CAD) systems. This class will help in the transition from high school to college, especially for those students who will follow engineering, architectural, or other technical fields. The numerous applications of computer aided design systems to design, mechanical drawing and drafting are also studied. The course will be taught using state of the art technology including industry-standard AutoCAD software.
Prerequisite: PLTW IED/DDP
Grade Levels: 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Advanced Computer Assisted Design (CAD)
This course covers the fundamentals and techniques of three-dimensional solid modeling using industry-standard AutoCAD software. This is a project-oriented course where participants create design layouts and documentation to support selected mechanical design projects. This is a good class to begin applying design and engineering skills for future careers and college.
Prerequisite: PLTW IED/DDP
Grade Levels: 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Architecture
It is important that houses and other structure are structurally sound. It is also important that houses, buildings, and other structures are designed to be visually appealing. The objective of this course is to provide student with the opportunity to develop and refine architectural abilities related to residential and commercial design. Specialty designs will include floor plans, elevations, electrical plans, foundation plans, plot plans, cost estimates, and more. Various software programs will be taught in conjunction with modeling, and freehand sketching techniques to round out the student's knowledge and abilities. Projects will include the modeling and photographing of various commercial and residential buildings. Anyone who will design, build, or buy a home or commercial building will benefit from this course.
Prerequisite: PLTW IED/DDP
Grade Levels: 10, 11, 12
40 Weeks – 1 Unit
Examination: Local

Basic Electricity / Electronics
This first course in electrical science is designed to provide an overview of electricity and electronics. Topics of study include electrical circuits, house wiring, printed circuit theory, energy sources, and magnetism. Manufacturing and related research development will also be studied. Content and objectives are arranged to stress basic information and introductory skills.
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Construction Systems
One of the largest and most important industries in our economy is commercial and residential construction. The construction industry is responsible for the building, maintenance, and repair of roads,

bridges, dams, airports, homes, schools, offices and hospitals. This one semester course will examine the construction industry, and its materials, technology, and occupations. Students will have an opportunity to gain hands-on experiences in the design and construction of several types of commercial and residential structures. This course provides important background for anyone who will be employed in some part of the construction industry or living and working in the products of that industry. This course is offered in every-other school year (i.e. 2013-2014, 2015-2016…)
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Graphic Communications
Success in today's rapidly changing world is often determined by a person's ability to communicate. In this course students will develop the necessary skills to interact with graphic communication systems and identify career opportunities in the graphic communication field. Through the completion of practical hands-on activities, the student will cover the design, development, and generation of an image for a specific product. The emphasis of this course is on 21st century technology and will include activities in animation, web design, screen-printing, morphing and interactive multimedia. Career edu
cation is covered by exposure to the wide variety of graphic communication job opportunities.
Prerequisite: None
Grade Levels: 9, 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Media Design & Video Production
Our modern world is increasingly reliant on the creation and distribution of various forms of communications. Millions of people are engaged in the creation and maintenance of systems used to communicate audio and video information through the use of a variety of outlets including television and the internet. This course introduces those systems most utilized for mass communication, their impact on society, and related careers. Students will have the opportunity to sample and become familiar with communication technology and related careers through meaningful and practical activities. Students will have opportunities to create projects while engaging in a variety of activities including desktop publishing, audio and video editing, public speaking, and the use of audio and video equipment. This course will provide students with a very broad-based look at the communications industry and with many of the careers available in this field. *(Previously known as Communication Systems.)*
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks – ½ Unit
Examination: Local

Independent Study in Technology Education
A limited number of students are eligible to choose this program in any of the technical courses offered in the district's high schools. Registration is limited to the number of available spaces. Specific details are available through Technology Education faculty and counselors.
Prerequisites: (2) units of Technology Education credit and special recommendation
20 or 40 Weeks/5 Meetings per Week – ½ Unit or 1 Unit
Examination: Local

Tool Time *(Manufacturing Systems)*
This course provides each student with the opportunity to explore the materials and processes used by industry to produce saleable products. During this one-semester course, students will gain hands-on experience with a variety of materials including wood, metals, plastics, ceramics, and with a wide variety of processes to make useful products. Each class will be formed into a manufacturing enterprise that will be designing and manufacturing a product for sale. This activity will provide real-world experience with many of the facets of industry, including finance, management, personnel, production, sales and distribution, safety, materials procurement, and quality assurance. As everyone is touched and affected by the manufacturing sector of our society through our communities, occupations, and as consumers, everyone needs to have an understanding of the workings of manufacturing systems. This course is offered every-other year (i.e. 2014-2015, 2016-2017…)
Prerequisites: None
Grade Levels: 9, 10, 11, 12
20 Weeks – 1/2 Unit
Examination: Local

Computer Networking 1 *(Cisco Networking)*
This full-year course is intended to teach students the skills needed to design, build, and maintain small to medium sized computer networks. Students learn different network designs and how to support them. Students also learn the languages that networks use to communicate information and work with networking equipment such as routers, hubs, repeaters, and switches.
Please note: Computer Networking 1 may substitute as a third unit of mathematics credit.
Prerequisite: None
Grade Levels: 10, 11, 12
40 Weeks – 1 unit

Computer Networking 2 *(Cisco Networking)*
Students work in a lab setting while learning about the design and building of network systems. After completing Networking 1 & 2, students are eligible to take the *Cisco* Certified Computer Networking Associate (CCNA) certification exam.
Prerequisite: Computer Networking 1
Grade Levels: 11, 12
40 Weeks – 1 Unit