

## COURSE OFFTERTNGS



## WELCOME TO KALKASKA HIGH SCHOOL

Dear Students and Parents,

One of the keys to success at Kalkaska High School is the careful planning of the courses taken during your four years at KHS. The purpose of this curriculum guide is to help in choosing the right courses for you.

The school staff believes course selection is important. It should reflect the student's own interests and abilities, future plans, as well as consideration of his or her parents' wishes.

We encourage parents and students to work together in planning for all of your years at Kalkaska High School. In designing your plan, feel free to consult with our counseling and teaching staff. In addition to our staff, we have a computerized career information system available. This system includes a career search that can help students select courses to meet post high school plans.

Graduation requirements are included in this guide. Be sure to read the course description before finalizing your plan. Plan for a variety of courses. The more skills you acquire, the more options you will have upon graduation.

Good luck at KHS. I hope your four years here will be enjoyable, fulfilling, rewarding and challenging.

Respectfully,


Principal


GRADUATION REQUIREMENTS


## MICHIGAN MERIT CURRICULUM

- 4 credits English
- 4 credits Mathematics ( 1 credit Algebra, 1 credit Geometry, Algebra 2 and one additional Math credit)
- 3 credits of Science (Biology, Chemistry or Physics, and one additional science credit)
- 3 credits of Social Studies (US History and Geography, World History and Geography, 1/2 Civics, and $1 / 2$ Econ)
- .5 credit Healthful Living
- .5 credit Physical Education
- 1 credit of Visual, Performing, and Applied Arts
- $1 / 2$ credit of Computer Applications
- 2 credits of a World Language

Total of 25 credits is required for graduation.

# 等 <br> CLUBS AND ORGANIZATIONS 

National Honor Society
Drama Club
Chess Club
Adventure Club
Key Club

Varsity Club
Student Council
SEEDs
Sign Language


# HIGH SCHOOL INTERSCHOLASTIC SPORTS 

MENS

Baseball
Basketball
Cross Country
Football
Golf
Hockey
Track
Wrestling
Soccer

WOMENS

Basketball
Cheerleading
Cross Country
Golf
Softball
Track
Volleyball
Wrestling
Soccer


# KALKASKA HIGH SCHOOL FIGHT SONG 

Smash right through that line big Blue.
Watch the points keep growing.
Blazer teams are bound to win.
They're fighting with the vim. Rah, rah, rah!
See that line, it's weakening.
We're going to win this game.
Fight, fight, rah, team, fight!
Victory for Blue and White! Fight!

## Course Offerings

## Business

Computer Applications I
Computer Applications II
Baker College Computing I
Baker College Computing II
School-To-Work
Economics Of Marketing

## English

Cinema Studies
Creative Publishing and Digital Design
Creative Writing
Theatre I
Theatre II
English I
English I (Honors)
English II
English II (Honors)
English III
English III (Honors)
English IV
English IV (Honors)
Novels
Read 180

## Fine Arts

Art
Art (Advanced)
Art and Photography
Band - Jazz
Band - Symphonic
Choir
Design
Design (Advanced)
Sculpture

## Foreign Language

Spanish I
French I
Spanish II
French II
Spanish III and IV
Mathematics
Algebra I
Algebra II
Algebra II (Honors)
Personal Finance
Applied Statisitics
Baker Calculus
Baker College Algebra
Baker College Intermediate Algebra
Fundamental Math
Geometry
Geometry (Honors)
Baker Pre-Calculus
Sports and Recreation Mathematics
Statistics

## Physical Education

Health
Sports Activity I
Sports Activity II
Personal Fitness
Advance Physical Education
Weights and Conditioning
W.O.W (Working on Wellness)

## Science

Anatomy \& Physiology
Astronomy
Biology
Biology (A.P.)
Biology (Honors)
Biology II (Honors)
Chemistry
Chemistry (Honors)
CSI: Forensic Science

Earth Science
Earth Science (Honors)
Environmental Geography
Geology of the National Parks
Physics

## Social Studies

American History
American History (Honors)
American Warfare
Civics/Econ
Civics/Econ (Honors)
Contemporary Political Issues
Current Events
History of Pop Culture
History of American Western
History of American Civil Rights Movement
The History of Sport
Michigan History
Psychology
Social Psychology
Street Law
World Geography
World History
World History (A.P.)

## Career Technology Center

$11^{\text {th }}$ and $12^{\text {th }}$ Grade
Located in Traverse City

## Odyssey

Offers a series of on-line courses for credit recovery. Classes are available during the day and after school.


| CLASS SEQUENCE |  | SUBJECT AREA: |  |
| :---: | :---: | :---: | :---: |
| GRADE | COLLEGE PREP | $\begin{aligned} & \hline \text { VOCATIONAL/ } \\ & \text { BUSINESS/TRADE } \end{aligned}$ | WORKPLACE / MILITARY |
| $9^{\text {TH }}$ GRADE | H. English 9 <br> H. Geometry <br> H. Earth Science <br> H. Am. History <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Elective <br> Computer Apps | English 9 <br> Algebra I <br> Earth Science <br> American History <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Electives <br> Computer Apps | English 9 <br> Algebra I <br> Earth Science <br> American History <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Electives <br> Computer Apps |
| $10^{\text {TH }}$ GRADE | H. English 10 <br> H. Algebra II <br> H. Biology 1 <br> H. Civics/Econ <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Elective <br> Computer Apps <br> Economics | English 10 <br> Algebra II <br> Biology I <br> Civics/Econ <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Electives <br> Computer Apps | English 10 <br> Algebra II <br> Biology I <br> Civics/Econ <br> Foreign Language <br> Health <br> Phy. Cond. / Phy. Ed. <br> Electives <br> Computer Apps |
| 11 ${ }^{\text {TH }}$ GRADE | H. English 11 <br> Pre-Calculus <br> H. Chemistry <br> Social Studies Class <br> Economics <br> Foreign Language <br> AP Courses <br> Direct Credit (Baker) <br> Electives | English 11 <br> Geometry <br> Economics <br> Social Studies Class <br> Career Technical Center <br> Foreign Language <br> Electives | English 11 <br> Economics <br> Geometry <br> Social Studies Class <br> Career Technical <br> Center <br> Foreign Language <br> Electives |
| 12 ${ }^{\text {TH }}$ GRADE | H. English 12 <br> AP Calculus <br> H. Biology II <br> Physics <br> Foreign Language <br> Social Studies <br> Elective <br> AP/Baker Courses <br> Electives | English 12 <br> Career Technical Center <br> Foreign Language <br> School-To-Work <br> Electives <br> Economics | English 12 <br> Foreign Language <br> School-To-Work <br> Electives <br> Economics |

## BUSINESS

## Baker College Computing I

Grades 11-12
This is a Direct Credit class through Baker College that uses the "INF Word Processing and INF 113 Electronic Spreadsheets" curriculum Introduces students to word processing software and applications.
This will include demonstrating the ability to perform basic Windows operations commands and word processing commands, which include creating, saving, printing, formatting, editing, and retrieving documents. This class will also introduces students to beginning electronic spreadsheet terminology, concepts, and applications. Students will gain the ability to enter/edit, save/retrieve files, format, and print spreadsheets and reports. Students are also introduced to basic formula development.

## Baker College Computing II

Grades 11-12

This is a Direct Credit class through Baker College that uses the "INF 114A Introduction to Database Applications and INF 141A Microsoft PowerPoint" curriculums. This class introduces beginning database terminology, concepts, and applications using a file management software program. Students will demonstrate an understanding of data hierarchy; the ability to design simple
files, edit file content, print file content, and simple reports; and the ability to search and sort files and use pre-existing formulas. Provides students with hands-on experience in the use of Microsoft PowerPoint to develop computer-based presentations. Topics include creating slides, handouts, speaker's notes, and outlines as well as the use of PowerPoint Wizards and Templates.

## Computer Applications I

## Grades 9-12

This is a practical, introductory computer applications course that helps students in learning to use a wide range of computer application programs. Students practice using Microsoft Office. They create presentations and text documents, practice using command keys and formatting material for ease of reading. This course will touch on touch typing, requiring students to increase their typing speed throughout the semester. Students will also gain some experience in music editing, Windows Movie Maker, website development, photo editing, Google Earth, and general Internet usage. All students must have an online experience in high school and this class fulfills this $1 / 2$ credit.

Semester Course

Computer Applications II

## Grades 10-12

Computer Applications II is designed as a continuation of Computer Applications I. The course covers advanced features of OpenOffice Writer, Calc and Impress, integration of OpenOffice applications, database management, desktop publishing, Windows Movie Maker, website development, photo editing, Google Earth, and general Internet usage. Prerequisite: Computer Applications I

## The Economics of Marketing

 Grades 9-12This class introduces students to the basic principles and concepts in marketing. Different concepts including marketing strategies, competition, customer service, and companies that have found marketing success. Students will be challenged to apply what is learned in this class to real world marketing issues. This class will open a school store where the students will assist with management. The students will be taking inventory, swelling products, conduction customer surveys, and other tasks. This class will help kids interest in sales, marketing, math, and working with others.

## School-To-Work

## Grade 12

Students enrolled in School-To-Work develop job competence and apply good work habits while using employment as a source of learning. Participation in this program requires a written agreement between the school, employer, and parents/student: fifteen (15) hours of recorded work per week, identified career objectives, and an on-file occupational job analysis.

Both the study in school and the part time job are to be planned, supervised, and documented.

## ENGLISH

## Cinema Studies

## Grades 9-12

This semester long Language Arts class will look at movies the way we do literature. The plot, character and setting will be studied as well as various actors and directors. We will also compare the movies to original literature. In addition we'll be looking at and writing movie reviews. This class will be offered to $9^{\text {th }}-$ $12^{\text {th }}$ graders.

Units studied: Introduction and orientation, opening scenes/opening chapters (exposition), a critical approach to viewing cinema, comparative studies (from page to screen), genre, actors and actresses (a visual variable), directors, producers, and authors.

## Creative Publishing/Digital Design Grades 9-12

This class introduces the student to journalism and includes history, techniques, and style, as well as concentration on spelling, grammar, and proofreading of the journalistic composition of students.
Students are involved in writing, research, reporting, editing, distribution, promotion, finance, and photography as it relates to journalism.
This class is responsible for the publication of the school yearbook and the school newspaper.

## Creative Writing

## Grades 9-12

This course focuses on writing for enjoyment. Students will also write a variety of papers, stories, and journals that will focus on building confidence in student writing.

## English I

## Grade 9

English I is a survey course which includes a variety of high school reading and writing strategies and focuses on inter-relationships and self-reliance. The big ideas in this course include relationships, survival, sacrifice, true wisdom, truth, integrity, courage, and conflict resolution. Literature study includes novels, plays, poetry, and short stories, with an emphasis on understanding literary terms as well as critical reading and thinking skills.

Listening comprehension and oral communication are practiced and polished throughout the year. Composition focuses on the process of writing. A variety of papers will be assigned and assessed including a formal research paper. Upon completion a student with a grade of B+ or better may elect Honors English II.

## English I (Honors)

## Grade 9

Although the basic objectives remain the same as the English I classes, higher level thinking and writing skills are expected. Writing assignments are based on several expository styles that utilize both the literature book and a variety of other sources including real-life situations. Essay types are introduced and assigned. Research projects and papers are required and vary in length.

The class begins the process of searching for personal goals for college and college exam preparation begins in this course. Students are expected to practice good oral communication and listening comprehension. Prerequisite: B+ in 8th grade English.

## English II

## Grade 10

English II is an American Literature course emphasizing critical response
and stance when reading, discussing, and writing. The anchor texts are The Crucible, The Adventures of Huckleberry Finn, Of Mice and Men, and A Raising in the Sun. The "big ideas" around which the anchor themes are built are camouflage, change and friction, resilience, and abundance/scarcity. Student writing will cover a wide variety of genres, including journal, personal reflection, analysis, persuasion, and research. Connections to the real world are incorporated in every anchor text. Skills toward performing well on the ACT PLAN and Michigan Merit Exam are practiced throughout the year. Students earning a B or higher may elect to take Honors English III course as juniors.

## English II (Honors)

Grade 10
Although the basic objectives remain the same as English II classes, higherlevel thinking and writing skills are expected.

Writing assignments are based on several expository styles that utilize both the literature book and a variety of other sources including real-life situations. Essay types are introduced and assigned. Research projects and papers are required and vary in length.

Personal goals for college and college exam preparation begins/continues in this course.
Prerequisite - B+ in English I and teacher recommendation. A student must maintain a C or better to remain in the honors program.

## English III

Grade 11
English 3 is a British and World Literature course that focuses on Transformational Thinking and Big Ideas such as the Use of Language, Decision-Making, Technology, Civilization, and Survival. Periods covered include Old English, Middle English, Renaissance, Enlightenment, Romanticism, Contemporary British, American, and World Literature. Anchor texts include Beowulf, Canterbury Tales, The Tragedy of Hamlet, Lord of the Flies, and Night. Vocabulary, grammar, and practice for the American College Test (ACT) are woven into the format of the course.

## English III (Honors)

## Grade 11

All of the basic objectives and texts remain the same as the general English 3 classes; however, higherlevel thinking skills are essential and expected. Students will demonstrate their mastery through essay tests and written assignments for a variety of purposes. Students are challenged to achieve deeper understanding through sophisticated discussions and analysis of authors, styles, themes, historical influences, and connections to the present. Woven into the curriculum is an emphasis on ACT and college readiness.

## English IV

## Grade 12

This class is a comprehensive exploration of reading and writing for the non college-bound, as well as the student seeking college preparation or a vocational career. Emphasis is placed on the reading of novels, short stories and poems, and the writing of various essays, creative short stories and poems. Special time will be given to improving students spelling, grammar, and organizational skills. The preparation of research papers of varying length will be studied, as well as career-oriented writing skills to produce sufficient resumes. This course is meant to prepare seniors of diverse abilities for a future outside of high school.

## English IV (Honors)

## Grade 12

This class is a literature course that focuses on Leadership and Big Ideas such as Power of Story, The American Dream, and Responsibility. Periods covered include Contemporary, Magical Realism, Post modernism, and American and World Literature. Anchor texts include Their Eyes Were Watching God, Things Fall Apart, Animal Farm, 1984, and The Grapes of Wrath. Grammar and vocabulary practice are also woven into the format of the class. Students will demonstrate their mastery through essay tests and written assignments of various purposes. A student must maintain a $C+$ or better to remain in the honors program. Prerequisite- B in English.

## Novels

This is a fun literature class that focuses on the art of reading. Students will be exposed to a variety of resources including the book Bird By Bird by Anne Lamott, short stories, documentaries, media sites, and film. Students have an opportunity to do reading circles and read a number of popular books and read books that are interesting to them.

## Read 180

Grades 9-11
Read 180 is the new way to learn all about the subject of English. In this class students use a teen-friendly computer program to improve their reading and writing skills. They read high-interest books and work in small groups with the teacher on a variety of English related topics. In other words, students get to spice up their learning by reading numerous teen angst and classic books, and by working on the computer every day. (Full Year)

## Theater 1

Grades 9-12
Theater 1 is a semester long class that concentrates on the "front state activity" of a drama production. In this class students learn about voice control, enunciation, and projection. They also learn about getting into character including essential and dramatic body movement. Drama techniques (such as blocking and stage direction) are covered. Students will have to perform 1-2 plays in front of the school during class. Daily participation and
participation in the school plays are a large part of the students' grades.

## Theater 2

Grades 9-12
Theater 2 is offered $2^{\text {nd }}$ semester. Theater 1 is not required before taking Tehater 2. Theater 2 focuses on "backstage activity." This class will work together with the after-school drama club, who will be working on the Spring Musical. Theater 2 students will work on the non-acting aspects of a production including scenery, props, programs, sound/lighting, costumes, etc. Some after-school time will be required so students can meet with the drama club, finish tasks, and be an important part of the evening productions.

## FINE ARTS

## Art

## Grades 9-12

This is a full year art class for those students who like to draw and paint. In this class, students create visual communication of ideas through a variety of media with an emphasis on creativity and workmanship. Society, nature and the man made environment serve as a source of ideas and subject matter. The emphasis will be on realistic drawing and shading, transparent watercolor painting and opaque acrylic painting, and linoleum as a form of graphics. Other areas of art will also be studied including: design, art vocabulary, art history, critique of
art, and the presentation of art for display. All art students participate in an art show at the end of the school year. Art I is a class for those students who enjoy art as a hobby and for those students who eventually intend to specialize.

## Art (Advanced)

## Grades 10-12

Advanced Art is a full year art class for students who have successfully completed Art I and want to work on art at a more advanced level. Students create visual communication of ideas through a variety of media with an emphasis on creativity and workmanship. All advanced art students are expected to participate in an art show at the end of the school year. Advanced Art class may be repeated for a total of three years with understanding that students will create new and unique projects each year that meet the requirements of the Advanced Art assignments.

## Art and Photography

## Grades 9-12

Students will learn to use digital cameras and the different programs to manipulate pictures. This course will take a look at Art from a digital perspective.

## Band (Jazz Ensemble)

## Grades 9-12

Jazz Ensemble is a full year performance (outcomes) based class that is an "off-shoot" of the Symphonic

Band, thus all percussionists and wind players are required to be regular members of the principle ensemble - the Symphonic Band. This ensemble is very visible and active performing at basketball games, concerts, school assemblies, Jazz festival in the spring, and more! Students will be exposed to several jazz genres, complex rhythms and improvisations. Acceptance is by audition or director approval only. Typical personnel instrumentation includes: 2 alto saxes, 2 tenor saxes, 1 baritone sax, 4 trumpets, 4 trombones, 1 electric bass \&/or tuba, 1 guitar, 2 drumset/aux., percussion and 1 piano. Percussionists will be expected to rotate parts and read music.

## Band (Symphonic)

## Grades 9-12

Concert band is a full year performance (outcomes) based class that provides a wide range of musical styles, history, technique, and theory, including traditional and contemporary band repertoire. Concerts, district festivals, and marching performances occur throughout the year and attendance is required. Opportunities to excel individually are available to those who participate in Solo and Ensemble Festival, Honor's Band, etc. First semester in band will meet Physical Education requirement.

Choir<br>Grades 9-12<br>Concert Choir will be a multi-graded choral experience. A variety of music

will be learned along with techniques of vocal production and music reading. This ensemble will present two major performances during the year. There will be additional opportunities during the year for various community performances and small ensemble experiences.
Students develop an active understanding of components of music, form, rhythm and meter, musical style (genre), and cultural influences, and use their knowledge to explore the impacts of music in multiple areas of life. Students will work on performing in front of an audience and honing in on their singing and performance skills. Prerequisite: Previous experience encouraged, but not required

## Design

## Grades 9-12

This course provides the fundamentals used in industrial and commercial communications including lettering, use and care of instruments, geometric construction, size and shape description, multi view, and pictorial drawings. Students are instructed in the nature of symbols and abbreviations used in drawings representative of specific industrial fields. Many drawing problems evolve from practical shop situations. It is an introduction to design and woodworking.

## Design (Advanced)

## Grades 10-12

This course in intended to familiarize the student with the various drawing
techniques employed in industry. This includes orthographic projection, dimensioning, section drawings, pattern developments, pictorial presentations (isometric, oblique, etc.) and detail drawing of fasteners and other unusual features.

This course also is designed to acquaint the student with the various instruments used. The course may be repeated successfully three times. The subject matter becomes increasingly difficult with each repetition through more precisely detailed project drawings. The third year of repetition has several areas of optional specialization: architecture, marine, aeronautical, recreational vehicle design, etc.
Prerequisite-C in Design.

## Sculpture

## Grades 9-12

This yearlong class will work exclusively in three dimensional art areas. Projects to be covered will be: wood carving, relief sculpture, ceramic sculpture (as well as more functional clay projects), mobiles, and paper sculpture. Contemporary and historic artists will be viewed and discussed.

## FOREIGN LANGUAGE

## FRENCH I

Learning beginning French skills through dialogues, games, projects,
drills, and other class work. Become familiar with French culture and foods. Learn to take and write about yourself and your interests.

## FRENCH II

## Grades 10-12

Review and expand French skills through drills, games, and projects. Learn to express yourself in French through dialogues, and power point presentations in French. Enjoy a visit to a restaurant serving authentic French food.

## SPANISH I

## Grades 9-12

Learn beginning Spanish skills through dialogues, games, projects, drills, singing, and a puppet show. Become familiar with Spanish and Latin American culture and foods. Learn to prepare a Spanish dish and share with others. Learn to talk and write about yourself and your interests.

## SPANISH II

## Grades 10-12

Review and expand Spanish skills through drills, games, and projects. Learn to express yourself in Spanish through dialogues, puppet shows, and power point presentations in Spanish. Email a Spanish speaking pen pal. Enjoy a visit to a restaurant serving authentic Latin American food. Sing in Spanish as well.

## SPANISH III

Grades 11-12
Learn to read and express yourself in Spanish in the present, future, and past through interviews, communicative activities, drills, games, and your own dialogues in Spanish used in puppet shows and power point presentations. Learn more about the many Spanish speaking countries and their celebrations. Sing in Spanish, email a Spanish speaking pen pal, and enjoy a field trip to savor Latin American food and culture.

## SPANISH IV

## Grade 12

Refine all skills learned to this point in reading, speaking, and writing. Continue to learn new ways to express yourself and use them in dialogues, interviews, and power point presentations. Learn through games, drills, singing, and reading. Expand your knowledge of Latin culture through a field trip.
**Spanish 3/4 may or may not be offered based on student requests**

## MATHEMATICS

## Algebra I

## Grades 9-12

The course begins with a review of the four basic operations on fractional and decimal numbers. The student will learn the rules for adding, multiplying, and dividing single numbers. This information will be used to evaluate simple equations and solving equations
of one or more variables. Additional topics include sets, graphing equations, distribution properties, factoring, addition of like terms, ratios, inequalities, percentages, and functions.

## Algebra II A \& B

## Grades 10-12

Glencoe Algebra II strengthens student understanding and provides the tools students need to succeed in college. From the first day your students begin to learn the vocabulary of algebra until the day they take the final exam. Basic knowledge about functions is expanded with the use of graphing calculators.
Prerequisite - Algebra I

## Algebra II (Honors) <br> Grades 10-12

Honors Algebra II is an advanced class where topics are taught with more depth, intensity, and at a faster pace. An honors student is expected to work well independently, be a creative problem solver, respond positively in challenging situations, and show a high degree of interest and motivation.
Prerequisite - B in Honors Geometry or Geometry

## Applied Statistics

## Grades 11-12

This course is an introduction to statistical reasoning with an emphasis on concepts rather than in-depth coverage of traditional statistical methods. Topics include sampling and experimentation, descriptive statistics,
probability, binomial and normal distributions, and estimation. It is a semester look into the numbers of everyday life. It is a hands-on approach to statistics where interesting and relevant data is gathered. Computers will be used frequently as a tool for analyzing and presenting the data. It is a practical application of mathematics in our daily life.
1 Semester Course
Prerequisites: Algebra 2A

## Baker College Algebra

## Grade 12

This is a Direct Credit college math class that uses the MTH 111 Introductory Algebra curriculum. It is a semester Math course that introduces elements of algebra including real numbers, linear graphing, variable expressions, linear equations, polynomial operations and factoring, systems of equations, quadratic equations, and rational functions.

Prerequisite: Algebra 2 or Pre-Calc

## Baker College Intermediate Algebra Grade 12

This is a Direct Credit college math class that uses the MTH 112 Intermediate Algebra curriculum. It is a semester Math course that examines more advanced elements of algebra including rational functions, quadratic equations, radical expressions, complex numbers,
exponential functions, and logarithmic functions.

Prerequisites: Baker College Algebra or Pre-Calc

## Calculus (A.P.)/Baker College

## Grade 12

This course in designed to cover first semester college calculus. Completion should prepare the student for the advanced placement exam for A-B calculus. Topics include functions and limits, differentiation techniques and their applications, processes and applications of integration, and a study of logarithmic and exponential functions. Prerequisite is a strong precalculus background.
Prerequisite - B in Pre Calc

## Finite Math

## Grades 11-12

This course provides students with crucial skill building and practice necessary for success with the many standardized tests required by high schools and colleges. It is an enjoyable course where students will develop a greater appreciation of some the historical foundations of mathematics as we know it. There are several relevant topics like voting and apportionment and graphing theory, in addition to a wide range of topics that include set theory, logic, number theory, algebra, consumer mathematics and financial management, geometry, measurement, probability theory and statistics. Typically this class is appropriate for
any student who has successfully completed algebra 2 (or higher) and want an additional math class to touch up on some skills and keep the mind fresh moving toward the ACT or college.

## Fundamental Math

## Grades 9-12

Fundamental Math is an individually paced course designed to help students improve their math skills. This course covers the following topics (and more): basic mathematical operations, ratio and rates, percents, perimeter and area, measurements, angles and lines, basic algebra, statistics, probability, and algebra-based real-world problems.

## Geometry

## Grades 10-12

This course is an informal approach to the major concepts of geometry. The first half of the course emphasizes basic geometric shapes, terms and definitions and the conceptualization and application of congruence. The remainder of the course deals with similarity, ministration relationships, symmetry, and coordinate geometry. Prerequisite - Algebra I

## Geometry (Honors)

## Grades 9-12

This course begins with basic geometric definitions and relationships. Approximately one-half of this course will be development of two-column proofs and the logical thinking process.

The proofs will be related to angle relationships, triangles, parallel lines and circles. The remainder of the course will develop properties of plane and solid geometric figure including area, perimeter, volume, and surface area.
Prerequisite - Algebra I (H.S. A- in Algebra I or M.S. B in Algebra I)

## Personal Finance

## Grades 11-12

Personal Finance is a full year math class designed for students who are interested in a course designed to develop and reinforce the applications of mathematics in today's society. Students will investigate topics such as money management, banking, filing tax forms, calculating net pay, budgeting expenses, making cost comparisons, buying and renting a home, and finding the cost of operating a motor vehicle. The class will incorporate Dave Ramsey's Foundations in Personal
Finance curriculum and teaches students how to avoid debt, budget with intention, invest, and build wealth and donate to charities/non-profit organizations. This curriculum gives students the opportunity to set them on a path to win with money, allowing them to change the way they look at money forever. They will be empowered, equipped and entertained, while building confidence in their own financial decision-making. The goal of this course is to guide students in building a strong foundation in logical thinking and problem solving that will enable them to make good
decisions in their daily lives. It will help keep the mind fresh in preparation for the ACT and college entrance tests.

## Pre-Calculus/Baker Direct Credit

## Grades 11-12

This course is a foundation for calculus for the math-oriented student. Its use in problem solving is stressed in the first semester. Second semester topics include linear algebra, probability, complex numbers and basic calculus concepts.
Prerequisite - B in Honors Algebra II, or A- in Algebra II

## Sports \& Recreation Math

## Grade 11-12

This course will gather and analyze hands-on real life stats, rather than an indepth coverage of traditional statistical methods. Topics include sampling and experimentation, descriptive statistics, probability, binomial and normal distributions, and estimation. It is a semester look into the numbers of sports and everyday life. Computers will be used frequently as a tool for analyzing and presenting the data. It is a practical application of mathematics in our daily life. 1 Semester Course
Prerequisites: Algebra2a

## Statistics

## Grades 11-12

The purpose of this course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions for data. Students are exposed to four broad
themes: observing patterns and departures from patterns, deciding what and how to measure, producing models using probability theory and simulations, and confirming models. Prerequisite - C in Algebra II.

## PHYSICAL EDUCATION

## Advanced Physical Education

Grades 10-12
Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an indepth study in specific areas. The student will participate in activities that include (1) health-related fitness activities (cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition), (2) team sports, (3) individual or dual sports, and (4) outdoor pursuits. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Ongoing assessment includes both written and performance-based skill evaluations. This course is open to both females and males.

## Health

## Grades 9-12

The health class teaches students' prevention skills and how to make healthy choices about topics that greatly impact our youth in today's society. The following topics are discussed and explored: Mental/Emotional Health,

Infectious Diseases, Noninfectious
Diseases, Substances Abuse, Managing Conflict/Violence Prevention, Nutrition, and First Aid.
Semester Class

## Personal Fitness

## Grades 9-12

This class is designed for students interested in achieving healthy levels of fitness and wellness through a variety of lifelong activities. Students will design an individualized fitness program to improve cardiovascular fitness, muscular strength/endurance, body composition, and flexibility. Semester course

## Sports Activity I

## Grade 9-12

Students will be exposed to a variety of individual and team sports. Skills and modified games will used as progression. Cardiovascular fitness activities will also be incorporated. Semester Course

## Sports Activity II

## Grade 9-12

Students will be exposed to a variety of individual and team sports. Skills and modified games will used as progression. Cardiovascular fitness activities will also be incorporated.
Semester course

## Weights and Conditioning

## Grade 9-12

This course focuses on building
muscular strength and endurance through free weights, machine weights, and strength building activities. Proper lifting technique, safety, and spotting will be emphasized. Cardiovascular fitness activities will be incorporated. Semester Course W.O.W (Working on Wellness)

## Grade 9-12

This class is designed for students who wish to participate in an alternative physical education setting. Students will be exposed to a variety of fitness activities, as well as modified individual and team sports. The focus of the class is lifelong fitness and wellness.

## SCIENCE

## Biology

## Grade 10

This year long course, which students will be introduced to many biological concepts and require mastery of others. The major topics of study will include the cell, cell division, DNA, genetics, evolution, pathogens, and ecology. This course will provide laboratory opportunities both within and outside of the classroom. There will be an emphasis on using the scientific method to appropriately collect and analyze data, and both traditional and alternative assessments will be used.

## Biology (A.P.)

## Grade 12

A year long course which follows the AP curriculum suggested by the College Board. This course will be of great value to students wishing to earn college credit while still in high school. It will also be a great experience for those interested in a wide range of biology topics. Units of study will include the chemistry of life, cells, cell energetics, cell reproduction, genetics, classification, plants, animals, evolution, animal behavior, and ecology. The focus of the course will be preparation for the AP Exam which includes both multiple choice and free-response questions. The laboratory portion of the course will be extensive and emphasize advanced molecular biology techniques that most will not experience until their third or fourth semester in college. Students taking this course are required to have completed Biology II or be currently enrolled in Biology II.

## Biology (Honors)

## Grade 10

A yearlong course which follows the same curriculum as Biology I. Laboratory work in Honors Biology I will be more extensive, and, if time allows, several other topics will be reviewed such as insects, fungi, the immune system and the reproductive system. In addition to traditional assessments, laboratory practical's will also be used. Approval from a science instructor is required for enrollment in this course.

## Biology II (Honors)

## Grade 12

A yearlong course which reviews the Biology I curriculum in greater detail and emphasizes the conceptualization of facts learned. Laboratory work will be modeled after an Introduction to Biology college level course. Ecology will be the main focus of the entire year with many trips to area forests and bodies of water. Students taking this course are required to have completed chemistry, and they are required to have the approval of the instructor.

## Chemistry

## Grades 11-12

The food you eat, the clothes you wear, building materials for houses and cars, and medicines all result from chemistry. Chemistry is the study of materials: what they are made of and the changes they go through. Through study and experimentation, you will gain a better understanding of the world around you. Global warming, the ozone layer, vitamins, nuclear power, and electricity are only a few of the many topics covered. The study of chemistry begins with atoms, the building blocks of matter and continues to their products: how they affect our quality of life. An emphasis on developing safe and effective laboratory skills will be an important part of this course. If you are interested in science and are considering a career as a nurse, dental hygienist, veterinary assistant or any of a variety of other science-related fields, but math is a challenge, this is the course for you.
Prerequisite - Algebra 1

## Chemistry (Honors)

## Grades 11-12

Chemistry is the study of materials: what they are made of and the changes they undergo. Through study and experimentation, you will gain a better understanding of the world around you. Global warming, the ozone layer, vitamins, nuclear power, and electricity are only a few of the many topics covered. The study of chemistry begins with atoms, the building blocks of matter and continues to their products; how they affect our quality of life. This course is designed to prepare students for a college chemistry course.

## CSI: Forensic Science

## Grades 10-12

A semester long course which will introduce students to the application of science to law. The major topics of study will include: the crime scene, physical evidence, physical and chemical properties of evidence, the microscope, analysis of hair, fiber, tool marks, fingerprints, other impressions, forensic serology, and DNA analysis. Additionally, skeletal evidence and some forensic anthropology will be explored. This is a laboratory based course with an emphasis on laboratory skills required to process evidence once it has been collected. This class is geared toward juniors and seniors interested in science.

## Earth Science <br> Grade 9

The course begins with a study of the objects in our universe including stars, galaxies, planets, and satellites. Our solar system is covered with emphasis placed on the other eight planets. While covering our planet, we will include the study of latitude and longitude and time zones. From here, the earth is broken down into three main spheres, the atmosphere (air), hydrosphere (water), and lithosphere (land).

## Earth Science (Honors) Grade 9

Honors Earth Science is an interdisciplinary approach to the study of the earth and the universe around our planet. The approach mixes science, history, research, and student investigations. Emphasis is put on the impact of man on the environment, with practical information about topics such as ocean and lake uses. Astronomy, geology, meteorology, hydrology, oceanography, and environmental science are the special topics covered.

## Environmental Geography

Grades 9-12
Environmental Geography is a course that provides students with the basic concepts, technology, and methodology used in the study of geography. This class is designed to get students out in the field where students can begin to think spatial about their surrounds. We will be using GPS (Global Positioning System) in the field to map out the
school forest, locate the perfect hunting/fishing spot and much more. Map making, using Geographic Information Systems (GIS), and field work are just some of the activities we will be accomplishing. If you enjoy being in the outdoors and discovering the world around you, you will thoroughly enjoy this class.

## Geology of the National Parks

Grades 9-12
We live in an amazing country. There are hundreds of natural wonders in a day's drive from anywhere in the United States. Geology of the National Parks is a class that is designed to give an understanding and appreciation for these natural wonders. We will explore these parks with many photos, videos and experiences. Students who dream, wonder, and imagine about all the amazing landscapes this country has to offer will thoroughly enjoy this course.

## Physics

## Grades 11-12

Physics is the branch of knowledge that describes and explains the material world around us. Physics is broken down into several branches including: mechanics, sound, heat, light, electricity, and atomic structure. From building bridges and trebuchets, to racing matchbox cars and riding roller coasters, students will gain, through experimentation, a better understanding of the physical world around them. Students will develop sound problem solving and experimental skills. This
course is a must for students continuing in engineering, architecture, chemistry, biology, astronomy, computers, physical therapy, medicine, or any of a variety of math or science related fields.
Prerequisite - Algebra II

## SOCIAL STUDIES

## American Government

## Grade 11 \& 12

The purpose of this one semester course is to give each student an introduction to the American governmental system. Through the use of lecture, question and answer, discussion, projects, interviews and guests, the students will explore their relationships to the federal, state, and if possible the local levels of government. The class will stress the dynamic nature o our government and its revolution and evolution from pre-colonial days to current world leadership. There will also be attempts made to have each student understand how to access the political and governmental systems to make their needs and opinions know and acted upon.

## American History

## Grade 9

American History is a full year required course for graduation. It will provide students with an understanding of people, events, ideas, and documents important to the development of the United States. Through historical evidence, students will analyze and
evaluate historical events and personalities and how they impact our nation. The textbook will be supplemented by discussion, informational reading, lecture, audiovisual presentations, and hands-on activities. Students will explore our nation's history from the period of time after the Civil War to present.
One-Year Course

## American History (Honors)

## Grade 9

Honors American History covers from Reconstruction (the period between 1865 and 1877) to events that happen today. The class looks at information from a vast array of sources. Primary sources, such as William Jennings Bryan's Cross of Gold speech to the writings of Teddy Roosevelt, are used in class. Students will also experience secondary sources from a wide selection of supplements. The class focuses much of its energy in discussion and research. Students will be asked to draw conclusions between historical events and current ones. Research will also be emphasized in assignments. This combined with the textbook, movies, songs, and other sources make up the Honors American History Experience.

## American Warfare

## Grade 9-12

American Warfare Class: A semester class that will focus on the history of American warfare starting with the

French and Indian War and ending with the current conflicts in Afghanistan and Iraq. About 90 percent of the class will be taught using documentaries and other films. Frequent writing assignments, Cornell Notes, discussion, and debate will also be used to explore the subject matter. Although all American warfare will be covered some periods of history will also be thrown into the mix as well because of their relation to the subject matter (example: The Lewis and Clark expedition and westward expansion). Lastly, two periods of American History will be highlighted (more time spent on) throughout the semester, The American Civil War and World War II, because of the abundance of great resources available.

## Civics/Econ

## Grade 10

This course will provide a deeper understanding of the federal, state, and local governments, and how they operate. The students will learn about the structure and function of our national, state, and local governments under our American federal system. They will study citizenship and strengthen their understanding of the legal rights and the accompanying responsibilities citizens share in our democracy.

As the students analyze their role as citizens of the United States, they will also study the events, movements, people, ideas, and issues which make them citizens of the world as well. A
major focal point will be on the United States and its relationship to the rest of the world.

Students will become more proficient in researching, problem solving, interpreting maps and primary sources, and communicating both in writing and orally about global issues.

## Civics/Econ (Honors)

## Grade 10

This course will have the same material taught as the regular Civics/Econ class, but it will be taught at a faster pace. The work load will increase with the expectation that the students will be able to handle working more independently.

## Contemporary Political Issues

## Grade 9-12

Gay Marriage, Immigration, Universal Healthcare, Tort Reform, and Gun Control are all examples of issues facing our Nation, both old and young alike, as we progress into the $21^{\text {st }}$ Century. But what side of the fence do you stand on? Right or left, Democrat or Republican, or do you fall into a category all your own? Find out how other young minds feel, as we explore these issues in Contemporary Political Issues. Research current topics and build arguments to support your position. Work as a team to debate fellow students with opposing viewpoints. This class will be split into two sections, with each section focusing on one side of an issue. Both sides will then come together for a student led,
spirited, and respectful debate on the issues. Use this class to educate and engage yourself in the Political Issues that face your generation today and for years to come.

## Current Events

## Grades 9-12

Current Events is a study of what is happening in the world today. The course uses radio, TV, newspapers, magazines, and the Internet to study events as they happen. The course will use essay, note taking, group discussion, and short tests for evaluation. A final project will be completed using differing resources for a presentation. The emphasis will be on fun and learning about a wide range of topics from many resources. Students will also be required to use information from their social studies classes to analyze world events on a rapid basis and compare their analysis with experienced writers from around the world.

Semester Course

## History of Pop Culture

## Grades 9-12

This class will provide a look at the last 100 years in a new way, focusing on the development of our culture. This class will look at American History with emphasis on people, movies, art literature, entertainment, fashion, music, and sports. The class will also take a look at technological advancement, the effect of consumerism and the development of mass media in the $20^{\text {th }}$ century. Projects include group projects
and individual presentations and the class will be student led for the most part.

## History of the American Western

Grades 9-12
This course will provide an introduction to the history of the place that we now know as the U.S. West. A vast and varied region stretching from the Appalachian Mountains to the Pacific Ocean, the West has both been characterized by its diversity and bound together by a shared regional identity and history. Beginning with the eve of European expansion in the seventeenth century, and focusing largely on the late eighteenth through early twentieth centuries, this course will focus on the historical processes that have defined the West and its place within the United States. Using films, memoirs, letters, and articles, we will explore the struggles for land, resources, identity, and power which have characterized the West and its role in the nation, as well as the relationship between the western past and the myths and stories that have secured the region's prominent place in the American imagination.

## History of the American Civil Rights Movement

Grades 9-12
The Civil Rights Movement is one of the most significant sources of social change in the United States during the 20th Century. This course analyzes the structure and dynamics of
the Civil Rights Movement from the viewpoints of history, sociology, and political science. By paying close attention to the roles of organizations, leadership, ideology, political culture, gender, and counter-movements, students will be able to evaluate the short and long-term effectiveness of the Civil Rights Movement on American Society.

## Michigan History

## Grades 9-12

Michigan History is a semester elective course which will cover the history of our state from pre historic times to present day. Students will explore the social, economic, and political development of Michigan. The impact of geography, the regional Native Americans, the French and English rule, lumbering, the development of the railroads and industries are only a few of the many topics covered. Students will develop an understanding for the events and issues that have helped shape our state.
Semester Course

## Psychology

## Grades 10-12

Psychology is an introductory course designed to provide the students with an over view of the historical and current perspectives in the field of psychology. Topics include early, adolescent, and adult development, learning, remembering, language, motivations, and emotions, personality theories, and mental and behavioral
disorders. The textbook is supplemented by case studies, activities, and guest speakers. Career opportunities in the field of psychology are explored. Each student reads a book of his or her choice about some field of psychological research.

Semester Course

## Social Psychology

## Grades 10-12

This course makes use of a sociology text as the basis of learning about modern social problems. Units include socialization, culture, institutions, social movements and change, and social problems. The text is supplemented by units in drugs, crime, death and dying, women's rights, aging, morality, and alcoholism. Outside speakers, field trips, and films are utilized to add variety and validity to the class content. A nonfiction book report on a social problem is required during the semester.

Semester Course

## Street Law

## Grades 9-12

This class provides practical tips to survive in the law based world. Students will be introduced to man crime-based scenarios, role play, and simulations will be utilized in order to give students an idea for the legal system. Students will be exploring the social issues of organized crime, capital punishment, prison life, and the war on drugs. Lessons in this course will relate how the law applies to students in high school. By the end of the course,
students will have a better
understanding of how the law works for and against the member of a society.

## World Geography

## Grade 9-12

In World Geography, students examine the relationships among people, places, and environments that result in patterns we see here today. Students use the tools and methods of geography to study the principal regions in the world. Starting with the Americas, we will work our way towards Europe and Eurasia, North Africa and the Middle East, Sub-Saharan Africa, South, East, and Southeast Asia. Students describe the influence of geography on events of the past and present and analyze how location affects economic activities in locations throughout the world.

## World History

Grades 10-12
This course will be a survey of significant events, personalities, and issues that shaped and impacted the history of our world throughout history. The goal is to provide an understanding of the history and culture of the western, as well as the non-western world. Students will develop historical skills through reading, note taking, listening, discussing, and writing.

## World History (Honors/A.P.)

Grades 10-12
AP World History is a course designed to allow students to gain college credit
in World History while still in high school. This course analyzes and defines six overarching themes in global development from approximately 8000 B.C. to the present. Course evaluation will include periodic tests, team projects, and an assortment of comparative and transitional essays that develop thought, idea, conclusion, and document analysis. Prerequisite - C in previous social studies class.

CAREER TECHNICAL CENTER $11^{\mathbf{T H}} \& \mathbf{1 2}^{\mathbf{T H}}$ GRADE STUDENTS

## ARTS AND COMMUNICATIONS

## Visual Imaging Technology (VIT)

 (Clustered Graphic Design E Printing) ViT is a hands-on program focusing on foundational skills in creative digital image development and production to apply to a wide variety of related careers. The class is broken down into two major areas: offset printing, and graphic design for print and digital media. In addition, special projects and independent study options are available in video production and editing, screen printing, illustration, airbrushing, photography, and design for web. We develop and produce work for real clients in our community! Many of our students also get to go to area businesses to work alongside professionals and start building their portfolio.Career possibilities: Graphic Design,

Interactive/Web Design, Printing, Interior Design, Illustration, Fashion Design, Digital Photography, Animation, Advertising, Video Production.

## Business, Management, Marketing Technology

## Accounting / Office Technology

Accounting/Office Technology offers students the opportunity to learn accounting, office, and computer applications with an emphasis on interactive lab and "hands-on" activities. Students will be able to broaden their understanding of business, office, finance, medical, legal, and accounting principles and practices, and increase their skills through practical applications using both simulated and actual accounting data. Students can earn job title certificates in a variety of areas including: Office XP - Word, Excel, Access, and PowerPoint; Medical and Legal Office Specialist, Data Entry, Accounting Clerk, and Business and Personal Finance Specialist. General business and office procedures are practiced on a daily basis to help prepare students for the school-to-work transition. When qualified, students may apply for entry-level positions utilizing our co-op and work experience placement services. All students rotate through a two-week Front Desk-Office Assistant training which includes taking attendance, answering the phone, taking phone and voice messages, processing and stamping mail, copying, filing,
sending and receiving faxes, and training the next student to take over the front desk responsibilities.

## Computer Programming

VISUAL BASIC.NET and C++ are offered in an independent learning environment and is an excellent way to start a career in Game Programming! For an introduction to game engine writing, OpenGL is introduced to advanced students. Challenging activities and continuous updating of software versions and equipment make learning programming fun and efficient. Students are encouraged to expand the assignments and share what they learn with others. Individual projects allow you to develop your own ideas as your skills improve. This is excellent preparation for those going into information technology or a computer science curriculum at the college level.

## Web Programming and Design

The latest in software is available for students to learn the in-demand career of Web Site Design! Students completing this curriculum come away with an understanding of HTML, JavaScript, CSS, DHTML, XML, and PHP - the programming part of Web Design. Web development packages (Dreamweaver MX and FrontPage) allow students to apply their knowledge quickly to create and design sites for local businesses and agencies. Photoshop, Fireworks MX and Flash MX are learned to enable the student to add enhanced graphics to their work. This
area is excellent preparation for those going into Graphic Arts, Multimedia, or Animation at the college level. Upon completion of the HTML job title students are eligible for credit at Northwestern Michigan College.

## On-Line Session

This section of Computer
Programming/Web Programming and Design allows you to take the same curriculum on-line. Communication with the instructor is by email and assignments are given via a web site. You will come into the Career-Tech Center only for testing at a time arranged with the instructor. Allow at least a two-hour time slot in your class schedule if you choose this section.

## Culinary Arts / Hospitality

Is your favorite channel the Food Network? Do you love to cook for friends and family? Join the exciting world of food and service by attending the Career-Tech Center's Culinary Arts program. Using a Pro-Start program (nraef.org/prostart/) that is recognized nation-wide, students in the Culinary Arts program learn the skills and academics needed to succeed in the fast-paced industry.

Students learn in a classroom setting and apply cooking and serving techniques in the student-run restaurant, the World Class Café. Students learn all aspects of the industry from basic cooking skills to ice
sculptures and catering.

## Information Technology Academy (I.T.A.)

The 21st Century brings with it a huge demand for technically proficient specialists. These specialists need technical expertise to design, implement, and support the technology that exists in business and industry. Students in the ITA program will combine classroom training with inclass projects utilizing both current and legacy hardware and software from major IT companies. Test labs are used frequently to simulate local area network environments. Through a partnership with CompTIA, students are eligible to purchase discounted exam vouchers for technical certifications such as A+ and Network+, which serve as the basis for the first-year curriculum. Second-year students typically focus on advanced-level training from Microsoft and/or Linux. Co-op is also an option for most secondyear students.

## ENGINERING/MANUFACTURING AND INDUSTRY TECHNOLOGY

## AUTO BODY REPAIR

Students develop technical competencies to complete the actual repair of automobile and light truck bodies. Bodywork involves MIG welding, repairing damaged body panels, body panel replacement, and plastic filler applications. After completion of the bodywork, the repaired surfaces are refinished. The
repair person acquires hands-on experience using welding equipment, special hand/power tools, and paint spray equipment. Safety techniques are emphasized. As a requirement of the Auto Body Repair program, all secondyear students are required to take the State of Michigan Unitized Body Repair test. Passing this test is a State requirement to work as an auto body technician in a body shop in Michigan. This test will count as the student's semester exam. If they pass the test, they are not required to take the final exam at the end of the school year. If necessary, the test may be taken again second semester and will count as the final exam.

## Auto Mechanics

The Phase I Auto Mechanics course teaches the basic skills and knowledge necessary for all entry-level trainees. Shop Safety includes the use of jacks, hoists, and under-car maintenance. Students will disassemble, measure, and reassemble a four-stroke lawn and garden-type engine. Lubrication, cooling system theory, operation and service are also included in Phase I curriculum. Shop math is emphasized including units on whole numbers, fractions, decimals, metric system, basic geometry, and use of basic algebraic formulas to solve equations related to engine systems. Phase II students' learning focuses on automobile systems, steering, suspension and alignment, brake systems including ABS, electrical survival skills, and engine systems
including starting, charging, and ignition. All students are required to take three Michigan Certification Examinations. The program is NATEF (National Automotive Training Education Foundation) certified.

## Automotive Technology Academy

ATA students combine an academic workload with practical applications in Automotive Technology. ATA students gain real world experiences which puts them on a fast track toward a rewarding career. As students move through their junior and senior years, more and more time is spent in automotive dealerships working with experienced technicians. Today's automotive technicians need to be problem-solvers, independent learners, good team members, demonstrate good academic achievement, and have high-level technical skills in mechanics, electronics, and computers.

## Construction Trades

Students achieve a wide variety of hands-on experiences, all related to the multi-faceted construction industry. Experiences will be acquired through: proper use of technical vocabulary; interpretation and understanding of architectural drawings and blueprints; use of leveling and layout instruments; proper installation techniques of both concrete flat work and the laying up of masonry units; rough and finish carpentry; insulation, drywall hanging, and finishing; building codes and laws; and general construction safety.

Students have opportunities to use a wide array of power and hand-held tools.

## Drafting and Design Technology

This program will teach students technical drawing principles that are used in industry. Sketching and documents related to the areas of mechanical drawing, civil engineering, electrical/electronics and architecture are included. Students will gain experience using traditional drafting methods and tools along with introduction to and operation of computer aided drafting (CAD) software and equipment. Using CAD translated drafting skills and logic for the completion of assigned tasks will be emphasized.

## Electrical Occupations

Students learn how to install, maintain, and repair electrical equipment. An electrical technician must have many skills. He/she must have a working knowledge of technological areas including: electricity; electronics; appliance repair; air conditioning; heating; refrigeration; residential, commercial, and industrial wiring; motor controls; motors; electrical maintenance; and gas-operated equipment. Students in the Electrical Occupations program will develop skills in many of these areas..

## Precision Machining Technology

Precision Machining Technology is a one- or two-year program designed to provide students with entry level skills for career opportunities in the machine tool field. The students will gain
technical knowledge and skill in the setup and operation of the vertical milling machine, engine lathes, surface grinders, EDM machines, drill presses, band saws, and other support equipment. In addition, the student will receive varied instruction in safety, measuring, shop math, inspection and metallurgy. Students will learn entry-level skills in the operation and programming of CMM, lathes, CNC (Computer Numerical Controlled Machines) and milling machines. Both laboratory and project-based learning will be used extensively. Work-site experiences will be incorporated in the form of field trips, shadowing and part-time employment, as opportunities are available. Students will develop important team skills necessary for employment and advancement and will have the opportunity to examine options in machining. It is recommended (but not required) that students planning to enter the P.M.T. program take related classes at their home school such as drafting, shop, trigonometry, or metals. This is a TBAISD program housed at the M-TEC facility.

## Manufacturing Technology Academy

Manufacturers in our region are part of the rapidly expanding global economy and must have workers with high-level technical and academic skills to remain competitive. By preparing students through an integrated curriculum and extending the classroom into the workplace, students gain skills
such as critical thinking and problem solving. Students build job skills by learning to be members of a team as well as how to communicate effectively. The MTA integrates rigorous high school academic work, technical education, and worksite experiences to develop skills and competencies necessary for success after graduation.

## Power Equipment Technology

Students will disassemble, measure, and reassemble a two-stroke hand-held and four-stroke lawn and garden-type engine. Shop Safety will include the use of jacks and hoists, power tools, hand tools, and electrical safety. Electrical survival skills and engine systems including starting, charging, ignition, lubrication, and cooling system theory and service are included in the first-year curriculum. Second-year students' learning focuses on marine mechanics, motorcycles, lawn and garden equipment, compact diesel equipment, and hydraulic equipment. Co-op is an integral part of the second-year curriculum. There is a critical shortage of qualified technicians in marine and outdoor power equipment areas. Students typically work in lawn mower shops, marinas, forklift companies, rental contractors, motorcycle shops, golf courses, and equipment dealerships. Second-year students are encouraged to take either the two-stroke or four-stroke OPE certification exams. The program was recently evaluated by the Engine Equipment Training Council.

Program curriculum, facilities, budget, placement, equipment/tools, training aids, instructor credentials/qualifications, and reference materials were all reviewed. Upon completion of the review, the program was granted accreditation for electrical and two- and four-stroke cycle engines the first such accreditation in the state. This program is one of only 40 programs in the United States accredited by major manufacturers of outdoor power equipment.

## Skilled Trades

Skilled Trades is an exciting, hands-on program for students who want to learn to do a little of everything. You will gain experience in woodworking, welding, electricity and plumbing, painting, ceramic tile and a host of other useful skill areas along with basic custodial training. Become a wellrounded craftsman or discover an area you are good at and enjoy doing. In Skilled Trades, "we do it all."

## Welding and Fabrication

This program provides students with practical experience and instruction in the set up and use of equipment and processes common to the welding trade today. Theory and application of these processes are covered for ferrous and non-ferrous metals in flat, vertical, horizontal, and overhead positions. Fundamentals of welding layout, fabrication, and repair are also covered. Emphasis is placed on all safety
procedures typical of the welding trade. Welding and Fabrication students have the opportunity to prepare for and take American Welding Society (AWS) welder qualification tests which can lead to welder certification.

## HEALTH SCIENCES

## Allied Health I

The purpose of the Allied Health I program is to introduce students to the knowledge and skills required for employment within the diverse health care field ranging from nursing skills, skills used by physical therapists, and those used in the hospital laboratory. Students will study a curriculum consisting of basic skills common to many of the health occupations such as patient and worker safety, communication skills, medical terminology, and basic patient care skills such as vital signs and patient transferring, CPR and First Aid. Employability skills are also included. During the second semester students will have a work experience at a healthcare related work site. Students work one-on-one with a mentor putting their newly acquired skills to use

## Allied Health II

Allied Health II is designed for secondyear Allied Health students. Coursework will include anatomy and physiology, health maintenance, safety, CPR recertification, and advanced patient care skills. Work-based learning
may provide opportunities for work experience at local health care facilities or nurse assisting certification.

## HUMAN SERVICES

## Early Childhood Education

Early Childhood Education is a one-year program for students who are interested in careers relating to early childhood education. Students explore a variety of career opportunities by participating in one or two work experiences in elementary schools, preschools, special education classrooms, day care centers, and family day care homes.

Students also have the opportunity to participate in several workshops, conferences, field trips, and other related volunteer activities within their own communities to help reinforce their learning. Through classroom activities, students will also become more aware of current issues relating to children, families, and the workplace.

State licensing requires that all students must have proof of a negative TB test, medical health statement, DHS clearance for abuse/neglect. Students also participate in blood borne pathogen training, SIDS/SBS training, and have two letters of reference to support their work with children. They are also required to complete CPR and first aid training while in the program.

One Northwestern Michigan College (NMC) Service Learning credit can be
earned during the first year through successfully completing their work experience and full credit in ECE.

Students who successfully complete one full year in the Early Childhood Education and have met all criteria may co-enroll their senior year in two Child Development classes through NMC earning six college credits. (See download below.)

Job titles available are: Elementary Assistant; Special Needs Assistant; Preschool Assistant; Day Care Assistant; and Infant/Toddler Assistant.

## Public Safety/Protective Services Program

The Public Safety/Protective Services program is a two-year program designed to provide students with a broad base of practical experience, content knowledge, and related instruction for careers within the scope of public safety including law enforcement, fire fighting, and EMT. The program may be articulated with post-secondary educational institutions.

Students will have the potential to earn job title recognition in the following areas:

Law Enforcement Officer Trainee Motor Carrier Enforcement Trainee Crime Scene Investigation Trainee Marine Patrol Trainee
Fire Fighter I
Fire Fighter II

First Responder
Emergency Medical Technician Security Officer Trainee
Corrections Officer/Guard Trainee
Park Ranger Trainee
Conservation Officer Trainee
Dispatcher Trainee
Probation Officer Trainee

Interested students are invited to apply for admittance to the program via their home school counselor. Due to the sensitive nature of the content, as well as the potentially dangerous nature of the work experience and work-based learning components of this program, final admittance decisions will be contingent upon the following:

Interview with TBAISD personnel and local advisory committee members Letter of application
Three letters of recommendation (administrator, teacher, non-school related reference)
Physical considerations
Criminal background check
Academic performance
Age
Parental consent

## Teacher Academy

This program is designed to expand options for students interested in a career in teaching. The Academy pairs future teachers with mentor teachers to provide students with experiences in all aspects of school-related activities from board and parent/teacher meetings to classroom and professional
development experiences. Students will be exposed to a variety of topics related to education. They include classroom teaching strategies, classroom management, State of Michigan
Curriculum Framework, brain research, and more. In a process based on interviews, discussions, portfolios of student work, demonstrations, field trips and actual teaching experiences, students will gain a realistic understanding of teaching as a career.

## NATURAL RESOURCES AND AGRISCIENCE

## Agriscience / Natural Resources

Within our state of the art facility, this program prepares students for careers in the diverse Agriscience and Natural Resources career pathway. Employability skills are taught through hands-on participation in landscape design and floral design, interior plantscaping, hydroponics aquaculture, veterinary science, and natural resource issues such as Great Lakes ecology.

There is also opportunity to expand students' leadership skills through participation in the FFA Student Leadership Organization. Students may be able to compete and/or attend the annual state competition at Michigan State University utilizing knowledge gained from our program.

Classroom study is focused on plant and soil science, sales and marketing, design principles, watershed and
environmental stewardship, and land use issues. Please join us in our new state-of-the-art facility.

