



Gladys H. Oberle School
Program of Studies

2021-2022

ENGLISH COURSES

ENGLISH 9, 10, 11, 12 **(1130, 1140, 1150, 1160)**

1 Credit

English provides instruction for students who wish to attend a junior or community college or for those who plan to join the work force immediately after high school. Instruction provides opportunities for real-life applications of reading and communication and emphasizes the Virginia Standards of Learning.

PHOTOJOURNALISM I (1215)

1 Credit

This course is a comprehensive, career development program that will expose students to the diverse careers that make up Journalism. It will focus on various aspects of photography, story writing, presentations and various computer applications involving how the jobs can get done. This will be accomplished with the use of a camera, journal writing, audio visuals, photo editing and presentation applications and several field trips into the community.

PHOTOJOURNALISM II (1216)

1 Credit

A continuation of Photojournalism I, students will enhance skills previously learned. It will focus on various aspects of photography, story writing, presentations and various computer applications involving how the jobs can get done. This will be accomplished with the use of a camera, journal writing, audio visuals, photo editing and presentation applications and several field trips into the community.

CREATIVE WRITING I (1171)

1 Credit

This course emphasizes developing an effective critique and provides a climate that enhances enjoyment of creative expression. Students will experiment with literary genres and with various techniques and forms.

ADVANCED COMPOSITION (1177)

1 Credit

A continuation of course I, students will build upon and refine the skills and concepts developed previously and will be involved self-directed projects. Students will be encouraged to submit work for publication within and outside the school.

DEVELOPMENTAL READING

(1181, 1182, 1183, 1184)

1 Credit

Classes are designed for students requiring differentiated instruction in reading. This program provides an academically based opportunity for students to achieve a degree of mastery in phonemic awareness, phonics, fluency, vocabulary, and comprehension. Teachers support students' reading through continued assessment, the provision of instructional-level materials and planned interventions that reflect the student's Individualized Education Program, and the developmental nature of reading.

HISTORY AND SOCIAL SCIENCES COURSES

WORLD GEOGRAPHY I (2210)

1 Credit

Students will examine the environmental and cultural patterns of the major world regions. Students examine demographic and economic data and investigate the causes, effects, and possible solutions to current international conflicts, problems, and environmental concerns. Map skills are also emphasized.

WORLD HISTORY & GEOGRAPHY to 1500 (2215)

1 Credit

Students will explore the historical development of people, places, and patterns of life from ancient times to approximately 1500 A.D. Historical topics and geo-graphical concepts will be linked to form a framework for studying history. Students will take the Standards of Learning test during this course.

WORLD HISTORY & GEOGRAPHY 1500 to Present (2216)

1 Credit

This course will examine the geographic and historic themes from the middle ages to the present. A strong emphasis will be placed on the people and events that influenced modern issues. The link between geography and world history will be emphasized. Students will take the Standards of Learning test during this course.

VIRGINIA AND UNITED STATES HISTORY (2360)

1 Credit

Students will examine the political, economic, social and cultural growth of the United States, including the role of Virginia. Students will study major historical developments and their impact on modern society. Map and globe reading and comprehension skills will be emphasized. Students will take the Standards of Learning test upon completion.

VIRGINIA AND UNITED STATES GOVERNMENT (2440)

1 Credit

Students will examine both the structure and the function of the American government at the national and state levels. Students will study the American economy with an emphasis on consumer issues. They also will study the local government and the student's role as a citizen.

PSYCHOLOGY (2900)

1 Credit

This course is designed to introduce students to the systemic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with major subfields such as research and methods, biopsychology, growth and development, learning and memory, and individual and group behavior.

MATHEMATICS COURSES

ALGEBRA I (3130)

1 Credit

Algebra I includes the use of technology in Algebra, Linear Equations and Functions, using Algebra to analyze data and problem solving using Algebra. Students will take the Standards of Learning Algebra I test.

ALGEBRA I PART I (3131)

1 Credit

Algebra I Part I is designed to strengthen a student's background for algebra and to cover the first half of Algebra I. Students who successfully complete this course will take Algebra I Part II.

ALGEBRA I PART II (3132)

1 Credit

Algebra I Part II is designed to cover the second half of algebra. Students will also have a brief introduction to topics that prepare them for Geometry. This course completes the Algebra I requirement. Students will take the Standards of Learning Algebra I test.

GEOMETRY (3143)

1 Credit

Geometry develops skills of spatial visualization and emphasizes the need for clarity and precision of language and mathematics. Through discovery, the study of logic and completion of proofs, students perceive the role of reasoning in both mathematical and non-mathematical situations. The elements of coordinate geometry are treated along with plane geometry. Plane and solid figures are given a thorough treatment including relationships between figures, area, volume, and construction.

GEOMETRY Part I (3144)

1 Credit

This course will explore the same concepts as Geometry; however, the instruction will be given over a two-year (or two-semester) period. This course is designed to meet the needs of the non-college bound student who needs to understand basic geometry. Upon successful completion of Part 1, students would be expected to enroll in Part 2 the following year (or semester). Students must successfully complete both parts in order to meet the state requirements for Geometry.

GEOMETRY Part II (3145)

1 Credit

This course completes the Geometry requirement. Plane, solid and coordinate Geometry are studied. Students must successfully complete both parts in order to meet the state requirements for Geometry.

MATHEMATICS COURSES

ALGEBRA, FUNCTIONS, & DATA ANALYSIS (3134)

1 Credit

*Can be applied toward a standard diploma.
Course is taken before Algebra II.*

Students study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, or exponential equations or a system of equations.

ALGEBRA II (3135)

1 Credit

Algebra II expands and clarifies the concepts introduced in Algebra I. New topics include sequence and series, polynomial functions, introduction to logarithms, exponential functions, quadratic systems and conic sections. Emphasis is on algebraic processes and their use in problem solving. This course will enhance students understanding of the function concept. Students who complete this course will take the Standards of Learning Algebra II test

ECONOMICS & PERSONAL FINANCE (6120)

1 Credit

Students are introduced to the basic theory of scarcity, different economic structures used by world societies, the roles of individuals and government in the operation of markets and the interconnection of the global economy. Students will also learn how to navigate the financial decisions they must face and to informed decision related to career exploration, budgeting, banking, credit insurance, spending taxes, saving, investing, buying/leasing a vehicle, living independently and inheritance.

PERSONAL LIVING & FINANCE (3120)

1 Credit

Students study personal financial decision making involved in daily life. Concepts learned include money management such as banking, budgeting, credit, taxes, insurance, and investments. Students learn how to transfer algebraic and geometric concepts into everyday usage such as finding averages, square footage, carpentry, proportions, etc.

SCIENCE COURSES

EARTH SCIENCE (4210)

1 Credit

In this course, the student studies five major areas: physical geology, historical geology, meteorology, astronomy, and oceanography. Laboratory experiments are part of this class.

EARTH SCIENCE II: GEOLOGY (4240)

1 Credit

This in-depth course deals with the physical and historical aspects of the Earth. Emphasis will be placed on those geological processes and features that the student has encountered or may encounter during his lifetime. Extensive laboratory experiences and occasional field excursions are provided to enhance the students understanding and application of the course material.

EARTH SCIENCE II: OCEANOGRAPHY (4250)

1 Credit

In this course the theories of Earth's structure and plate tectonics will be presented as a base on which to build the explanation of the physical features of the ocean floor. Students will study the physical properties of sea water, marine chemistry, marine organisms, salinity and density, circulation within the oceans, waves, currents, tides, and oceanographic instruments and research. Emphasis will be placed on the major skills of practicing oceanographers and scientists.

BIOLOGY II: ECOLOGY (4340)

1 Credit

In this course the concepts of communities and ecosystems along with the cycles and interrelationships of living and non-living components of our environment are presented. Particular focus is on man's influence on these systems and environmental stewardship.

BIOLOGY (4310)

1 Credit

This course provides a program in biology which is both laboratory and lecture-oriented. Included are the studies of cell structure and function, genetics, and the diversity of life. There is a strong emphasis on lab work.

BIOLOGY II: ANATOMY AND PHYSIOLOGY (4330)

1 Credit

This is an advanced course which covers anatomy, physiology, and the pathology of humans.

CHEMISTRY (4410)

1 Credit

This course provides a program in biology which is both laboratory and lecture-oriented. Included are the studies of cell structure and function, genetics, and the diversity of life. There is a strong emphasis on lab work.

PHYSICS (4510)

1 Credit

This course is designed to explore physical phenomena observed in our everyday world. Emphasis is placed on the study of motion, forces, energy, optics and electricity and magnetism. An understanding of basic math concepts is an integral part of this class.

HEALTH AND PHYSICAL EDUCATION COURSES

HEALTH AND PHYSICAL EDUCATION 9 (7300)

1 Credit

Physical Education instruction emphasizes the participation of lifetime fitness activities and how it relates to personal wellness. During the health portion of this course, students will study alcohol, tobacco and drugs, diseases of the body, mental and emotional health, safety and injury prevention and violence prevention.

HEALTH AND PHYSICAL EDUCATION 10 (7425)

1 Credit

Physical Education instruction emphasizes the participation of lifetime fitness activities and how it relates to personal wellness. Classroom Driver's Education is offered as part of the health requirement.

DRIVER'S EDUCATION CLASSROOM INSTRUCTION (7015)

.5 Credit

Classroom driver's education is a prescribed course which students complete online with the support of school staff. Once completed, students receive their green card which allows them to privately take the Behind-the-Wheel class.

HEALTH & PE 10 (NO DRIVERS ED) (7400)

1 Credit

Physical Education instruction emphasizes the participation of lifetime fitness activities and how it relates to personal wellness.

ADVANCED PHYSICAL EDUCATION: INDIVIDUAL/DUAL SPORTS (7640)

1 Credit

This elective is offered to students seeking to continue participating in another PE class. The class will provide physical fitness training to improve one's health and wellness. The daily routine will provide participation in a wide variety of individual and team sport activities and is supplemented with cardiovascular and fitness activities.

ADAPTIVE HEALTH AND PHYSICAL EDUCATION (7700)

1 Credit

This course can be repeated for credit.

Physical Education instruction emphasizes the participation of lifetime fitness activities and how it relates to personal wellness.

ADVANCED PE: WEIGHT TRAINING (7650)

1 Credit

This elective is offered to students seeking daily participation in fitness activities. Students will gain knowledge of muscle groups and the exercises that compliment them and how the human body benefits from cardiovascular activity.

FOREIGN LANGUAGE COURSES

FRENCH I (5110)

1 Credit

In the beginning course, students gain an understanding of the components of a foreign language and of the study skills necessary to learn a foreign language.

FRENCH II (5120)

1 Credit

In the second year, students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations. Cultural study of the areas of the world where the language is spoken is expanded.

FRENCH III (5130)

1 Credit

In the third year, students complete their study of basic grammar of the language and continue to learn to communicate in real-life situations with increasing precision and accuracy. Students explore the use of the language in a wide range of cultural contexts.

GERMAN I (5210)

1 Credit

In the beginning course, students gain an understanding of the components of a foreign language and of the study skills necessary to learn a foreign language.

GERMAN II (5220)

1 Credit

In the second year, students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations. Cultural study of the areas of the world where the language is spoken is expanded.

GERMAN III (5230)

1 Credit

In the third year, students complete their study of basic grammar of the language and continue to learn to communicate in real-life situations with increasing precision and accuracy. Students explore the use of the language in a wide range of cultural contexts.

GERMAN IV (5240)

1 Credit

In the fourth year, students further develop proficiency in the language to increase understanding and appreciate of German culture. Students are expected to read and write in German with added proficiency.

SPANISH I (5510)

1 Credit

In the beginning course, students gain an understanding of the components of a foreign language and of the study skills necessary to learn a foreign language. As students begin to develop skills in listening, speaking, reading, and writing, they engage in active practice in real-life situations and in a variety of cultural contexts.

SPANISH II (5520)

1 Credit

In the second year, students continue to develop skills in listening, speaking, reading, and writing and to engage in active practice in real-life situations. Cultural study of the areas of the world where the language is spoken is expanded.

SPANISH III (5530)

1 Credit

In the third year, students complete their study of basic grammar of the language and continue to learn to communicate in real-life situations with increasing precision and accuracy. Students explore the use of the language in a wide range of cultural contexts.

MUSIC & ART ELECTIVE COURSES

ART I (Art Foundations) (9120)

1 Credit

This is the first of a two-part series of Art Appreciation exploring art from 15,000 BC to the present. Students will study the concepts and principles of art including line, form, shape, texture, color and space. The students will work in various media such as charcoal, pencil, pen & ink, crayons, markers, water colors and acrylics. Field trips to area museums and art galleries as well as research will supplement instruction.

ART II (Intermediate) (9130)

1 Credit

This is the second of a 2-part series of Art Appreciation. Students will work with 3-dimensional projects, computer art, and literary art. The students will work in various media such as charcoal, pencil, pen & ink, crayons, markers, water colors and acrylics. Field trips to area museums and art galleries as well as research will supplement instruction.

GENERAL MUSIC (9214)

1 Credit

Students explore areas related to music in the vocational (career-oriented outcomes), academic (music theory and history), belongingness (social interactions between students), and agency (self-esteem, motivation, and emotional development) domains to gain an appreciation and benefit of music.

GUITAR I, II (9245, 9247)

1 Credit

A brief history of the guitar along with a study of its respective musical styles will be covered in this course. Students will gain enhanced appreciation for music through playing the guitar and will learn how to read music notation, chord symbols, and tablature.

ART III (Advanced Intermediate) (9140)

1 Credit

The students will work in various media such as charcoal, pencil, pen & ink, crayons, markers, water colors and acrylics. Students will develop skills in a variety of 2-dimensional media. The course will refine established skills through the use of a variety of 2-dimensional media and place high emphasis on composition through organization of elements of art and use of principles of design. Fieldtrips to area museums and art galleries as well as research will supplement instruction.

ART IV (Advanced) (9145)

1 Credit

This course is designed to increase and develop skills in selected subject areas for the visually mature and advanced art student. The student will develop personal styles in approach and media and is encouraged to experiment creatively with materials and techniques. Fieldtrips to area museums and art galleries as well as research will supplement instruction.

ELECTIVE COURSES

KEYBOARDING APPLICATIONS (6153)

1 Credit

Students develop or refine touch keyboarding for the input of information. These skills are applied using computer software to produce a variety of personal and professional documents including resumes, letters, and reports.

COMPUTER LITERACY (0121)

1 Credit

Computer/technology skills are essential components of every student's education. This is the first of a two-part series of computer training. Students will explore the business/personal life applications of word processing, spreadsheets, and presentations with MS PowerPoint and database applications. Photo editing will also be introduced utilizing Corel Draw and Corel Paint.

INDIVIDUAL DEVELOPMENT (8209)

1 Credit

Students focus on encouraging personal potential of self and others throughout the life span, enhancing positive views of self and others, managing stressful situations, and formulating a plan to achieve career goals.

INDEPENDENT LIVING SKILLS (7896)

1 Credit

This course will cover the topics of shopping and financial management, health and safety, self-determination, and accessing and using public transportation, social, and recreational facilities.

LIFE PLANNING (8226)

1 Credit

This is a comprehensive, career development program for students making the transition to life after high school. Students develop a life-management plan with emphasis on building and maintaining healthy relationships and functional families; developing strategies for lifelong career planning; and establishing a plan for using resources. Textbooks, audio visuals, resources from the Internet, and several field trips into the community will supplement class instruction.

SOCIAL DEVELOPMENT INSTRUCTION (22253)

1 Credit

This course can be repeated for credit.

Students focus on appropriate interactions with peers and adults. Topics covered will include making and keeping friends, interacting with the opposite sex, handling group pressure, expressing anger, responding to requests, and using self-control.

INTRODUCTION TO CULINARY ARTS (Cooking) (8249)

1 Credit

This course is intended to prepare students for eventual enrollment in the culinary arts program. Students will receive an introductory experience in the kitchen which will include hands-on learning experiences. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

ELECTIVE COURSES

CAREER, COMMUNITY, & FAMILY CONNECTION (8205)

1 Credit

This course combines the study of career development and family management. Students will study building healthy relationships, dealing effectively with family stressors and conflicts, and managing work, family roles and responsibilities.

FAMILY & CONSUMER SCIENCES I, II (8208, 8263)

1 Credit

Students are exposed to family planning concepts concerning cooking, nutrition, housekeeping, personal finance, personal wellness, and consumer issues.

SOL PREP

Students who have not passed the 8th grade SOL Assessment, who have experienced academic difficulties, or who have not passed specific End-of-Course Tests may be assigned to a course in the area(s) of their weakness(es). This course provides students the opportunity to strengthen academic skills prior to taking End-of-Course Tests.

FUNCTIONAL ACADEMICS (7843)

1 Credit

Students focus on academic skills needed in order to function within the community. Reading, math and writing skills are taught within units which cover personal information, personal safety, communication, time, money management, food, and community. Individual IEP goals and objects are included in the instruction.

CAREER & TECHNICAL EDUCATION COURSES

BASIC SMALL ENGINE REPAIR (8724)

1 Credit

Topics covered will include fuel and emission control systems, carburetion, ignition systems and lubrication systems. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

SMALL ENGINE REPAIR (8021)

1 Credit

This course carefully details the many systems, tools, and parts involved in the successful repair and also cover preventative maintenance. Students also learn more about career opportunities available. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

OCCUPATIONAL ORIENTATION: BIKE REPAIR (9805)

1 Credit

This course can be repeated for credit.

This course is designed to teach students the basis of maintaining bicycles from simple bearing system overhauls to tune-ups. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

OCCUPATIONAL ORIENTATION - AUTO DETAIL (9805)

1 Credit

This course is designed to expose students to cleaning services that meet the specifications of clients and/or the company for which they work. Students are tasked with vacuuming interiors to more intensive cleaning jobs, including hand washing vehicles, steaming, deodorizing interiors, applying protective agents to vehicles, polishes, and waxes.

CARPENTRY I, II & III (8601, 8602, 8603)

1 Credit

This course carefully details the many tools, systems, design and blueprints that are currently being used by contractors in the field of construction. Safety in the shop and workplace are emphasized. Students will also explore career opportunities. Students will complete the OSHA-10 (Occupational Safety and Health Administration CareerSafe) certification. Students will have an opportunity to participate in local and state level Skills USA activities and competitions.

BUILDING TRADES I, II (8515, 8516)

1 Credit

This course is designed to give students an introduction to the world of construction and maintenance for residential applications and through progress sections of this course, will also include commercial applications. Concepts in safety, tool usage, reading blueprints, designing electrical circuits, trouble shooting circuitry, and career exploration will be examined. Students will have an opportunity to participate in local and state level Skills USA activities and competitions.

INTRODUCTION TO AGRICSCIENCE (8003)

1 or 2 Credits

This course can be repeated for credit.

Students explore science as it relates to agriculture and develop an understanding of human relations, communication, the importance of agriculture to the economy, and key scientific terms related to the field of agriculture.

CAREER & TECHNICAL EDUCATION COURSES

CULINARY ARTS I (8275)

1 Credit

The fundamentals of food preparation techniques, equipment identification, meal presentation and menu planning are taught. Students will spend a major portion of their class time in the kitchen. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

CULINARY ARTS II (8276)

1 Credit

Students will receive instruction in the preparation of special dishes and salads, methods of broiling, steaming, and menu planning. Students will spend a major portion of their class time in the kitchen preparing lunch for students and staff. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

CULINARY ARTS SPECIALIZATION (8279)

2 Credits (36 weeks)

Students will be exposed to advanced cooking techniques. In addition of completion of the OSHA program they will also have the opportunity to participate in the National Restaurant Association ServSafe program of students for national certification. Students spend the majority of their time preparing meals for the school. Students will have an opportunity to participate in local and state level Skills USA activities and competitions.

CAREER & TECHNICAL EDUCATION COURSES

INTRODUCTION TO HEALTH & MEDICAL SCIENCES (8301)

1 Credit

This course introduces students to a variety of health care careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the health care system and to learn basic health care terminology. Instruction emphasizes safety, cleanliness, professionalism, accountability and efficiency within the health care environment.

HEALTH ASSISTING CAREERS (8331)

1 Credit

Students explore opportunities in the health care field by developing basic skills common to several assisting careers. They study basic terminology and explore the variety of career options available in the health care industry. Various fieldtrip opportunities will be available to see the careers in action.

MENTAL HEALTH ASSISTING CAREERS (8332)

1 Credit

Students learn and practice basic skills common to many mental health occupations. Instruction covers disorders, first aid, safety, basic mental health needs, and other topics.

MEDICAL TERMINOLOGY: (8384)

1 Credit

This course explores the root words, suffixes and prefixes of the vocabulary used in medical offices, hospitals and other health settings. Students review the nervous, skeletal, cardiovascular, muscle and other major systems of the human body, and they discuss terms related to physiology, anatomy and pathological conditions. Students learn to spell, define and pronounce common medical terms.

DESIGN MULTI-MEDIA & WEB (6632)

1 Credit

Students will demonstrate knowledge of hardware, software, and operating systems, and apply principles of layout and design through the design and creation of graphic design, multimedia and website projects.

IMAGING TECHNOLOGY (8474)

1 Credit

Students will learn the history and development of photography, identify camera types, parts of the camera, and camera systems, controls and speeds. Students will also learn to compose images using balance, use of foreground, middle ground, and background. Utilization of software to manipulate digital images will also be covered.

ENTREPRENEURSHIP (9093)

1 Credit

This course walks students through the entrepreneurship process incorporating cross-curricular skills like math, public speaking, creative arts, and critical thinking. Students will authentically apply concepts to design and launch a business from inception to realization.

COMPUTER PROGRAMMING (6640)

1 Credit

Students will develop an understanding of basic programming language – Python. Python is both beginner-friendly and currently used by major corporations (such as Google). It is a popular programming language used in Data Science among other growing tech fields like Machine Learning. Students will create code in a game-like platform using Loops, Nested Loops, Variables and more.

ADVANCED COMPUTER PROGRAMMING (6641)

1 Credit

Students will continue to study programming and developing code in a slightly more advanced language – JavaScript. JavaScript is the language of the web and is used across nearly every website. You may prefer to choose JavaScript if you are planning to also study web development. JavaScript's syntax is a little more difficult for beginners than Python.

CYBERSECURITY FUNDAMENTALS (6302)

Students will focus on the evolving and pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

EDUCATION FOR EMPLOYMENT EXPLORATORY PREP (9075)

1 Credit

This is a precursor to the education for employment classes. Students explore the soft skills involved in employment through both classroom-based instruction and community activities. Included are the studies of life skills, career exploration, transition skills inventory, and work readiness training.

EDUCATION FOR EMPLOYMENT EXPLORATORY DEVELOPMENT (9082)

1 or 2 Credits

This course can be repeated for credit.

Students explore independent living by identifying individual assets, interests, aptitudes and potential/realistic occupational skills. Classroom instruction includes life skills instruction, career exploration and work-readiness training.

EDUCATION FOR EMPLOYMENT I: DEVELOPMENT (9084)

1 or 2 Credits

This course can be repeated for credit.

Students investigate various occupational fields, examine occupational requirements, and select a career pathway. They begin to focus on improving and gaining skills required for specific occupations. Students are placed on a training site in the community to learn “real-life” employment skills.

EDUCATION FOR EMPLOYMENT II: DEVELOPMENT (9086)

1 or 2 Credits

This course can be repeated for credit.

Students will begin to make the transition from school to work by gaining technical skills, conducting a job search and maintain successful employment by demonstrating positive work traits and attitudes. Students may also begin to seek competitive employment.

VIRTUAL COURSE OFFERINGS

The Gladys H. Oberle School utilizes technology and VDOE approved online providers to offer high school courses online to students who exhibit a motivation to extend their learning beyond the courses offered at the Oberle School. Typical examples of the classes students take include foreign languages and higher-level math and science classes.

ADAPTED CURRICULUM

An adapted curriculum is available for students who are working towards an Applied Studies diploma. The curriculum focus for these students is addressed through their IEP goals and objectives. Assessment is provided through the Virginia Alternative Assessment Program (VAAP) in grades 6, 7, 8, and 11 in the core subject areas of reading, math, science, and history.

MIDDLE SCHOOL PROGRAM

English Grades 6, 7, 8 (1109, 1110, 1120)

This course emphasizes skill development in literature, writing, research, oral communication and media literacy. Students will continue to learn and expand the use of reading comprehension strategies. They will also enhance their literacy skills by developing more advance vocabulary and reading a variety of fiction, nonfiction and poetry. Students will plan, draft, revise and edit expository, narrative and persuasive pieces with attention to composition, written expression and usage/mechanics.

Students in 8th grade will complete the Grade 8 Reading and Grade 8 Writing SOL.

Math 6 (3110)

Middle school Math 6 places emphasis on the study of rational numbers to include integers, decimals, fractions and percent. Students will use ratios to compare data sets; identify and represent integers and their absolute value, use all four operations with rational numbers and integers; proportional relationships; focus on problem solving with area, perimeter, volume, and surface area; determine probability and use statistics; and investigate and solve practical problems involving equations and inequalities.

Math 7 (3111)

Middle school Math 7 places emphasis on algebraic foundations and proportional reasoning. Students will use order of operations to evaluate numeric and algebraic expressions, apply properties of real numbers, solve linear equations and inequalities, work with consumer application programs, work with rational numbers in a variety of ways, solve problems involving two and three-dimensional figures, probability, and statistics, perform statistical analysis, and analyze situations involving probability

Math 8 (3112)

In the Math 8 course, students review and extend concepts and skills from previous math courses and study new content to better prepare them for high school mathematics. Students will gain proficiency in computation with rational numbers, identifying relationships of rational numbers, the use of proportions to solve a variety of problems, solving multi-step algebraic equations and inequalities, and representing functional relationships in a variety of ways. Other topics included are: plane geometry (including Pythagorean Theorem and transformations), solid geometry (including problem solving with surface area and volume), probability, and statistics.

Science 6 (4105)

This course covers the study of the life, physical, and earth sciences to include topics on energy, matter, the solar system and space exploration. Students learn about the natural and technological world, improve their inquiry skills, and ability to solve problems.

Life Science 7 (4115)

This course covers the study of living things which includes the scientific method, characteristics of life, cells, and classification of living things, viruses, bacteria, animals, plants, and genetics. Students will study cellular organization, the classification of organisms, populations, communities and ecosystems.

Physical Science 8 (4125)

This course will cover the study of the phases of matter, force and motion, work, simple machines, conservation and transformation of energy, heat waves, sound, light, electricity, and magnetism. The student will develop inquiry and problem-solving skills within the context of scientific investigation.

Students will complete an SOL test during this course.

US History: 1865 to Present (2354)

This course focuses on the beginnings of the US through the Civil War. In-depth study of the political, economic, social, and cultural development of the nation is covered.

Civics and Economics 8 (2357)

This course examines the basis for the study of governments at the national, state, and local levels. The role and responsibilities of informed citizens in the democratic decision-making processes are emphasized.

WORLD HISTORY to 1500 (2215)

Students in 8th grade take this course and will earn a high school credit. In this course, students will explore the historical development of people, places, and patterns of life from ancient times until 1500 A.D. in terms of the impact on Western civilization. The focus is on the Mesopotamian, Egyptian, Phoenician, Roman, African Kingdoms, Migrating Peoples, Islamic, Byzantine, and Medieval civilizations.

Health and PE 6, 7, 8 (7111, 7121, 7210)

This course focuses on the development of basic skills for use in individual and team sports and well as the improvement of physical fitness. Health topics covered include nutrition, emotional health, health risk behaviors (drug, alcohol, and personal choices), personal safety, relationships, and hygiene. The Family Life Education program focuses on the topics of physiological changes in adolescence, transmission of HIV and prevention of AIDS as well as healthy relationships.

Middle School Electives

World Language

This course involves the study of the cultures of native French, German, Spanish, and Italian speaking people. Students will compare and contrast holiday traditions with other cultures. A highlight of each culture will be in the celebration of each culture's holidays with activities and food.

Art Exploratory 6, 7, 8 (9103, 9105, 9115)

This course is designed for the middle school student to investigate the various aspects of art which include concepts, color, and space. Students use various mediums for their projects.

Bike Repair I, II, III

This course is designed to teach students the basis of maintaining bicycles from simple bearing system overhauls to tune-ups. Students must complete the Occupational Safety and Health Administration (OSHA) CareerSafe.

Helping Hands

This course is designed to help students develop an appreciation of the concept of service to the community and helping others.

Computer Concepts I, II, III

This course is designed to help students develop and understanding of the usefulness of computers. Students will practice keyboarding skills and will apply learned knowledge to effectively use computer software to include some programs within Microsoft Office.

Reading 6, 7, 8 (1106, 1107, 1183)

This course is designed for students requiring differentiated instruction in reading. This program provides an academically based opportunity for students to achieve a degree of mastery in phonemic awareness, phonics, fluency, vocabulary, and comprehension. Teachers support students' reading through continued assessment, the provision of instructional-level materials and planned interventions that reflect the student's Individualized Education Program, and the developmental nature of reading.

Career Investigation

This course is designed introduce students to potential career options and will include exploring and identifying individual assets, interests and aptitudes which could potentially lead to occupational skills.

Introduction to Technology

Students will study the basic elements of all technology, including processes, energy, information and people. They will relate the impact of technology on society, environment, and culture to future consequences and decisions. Students utilize the design process through hands-on projects such as 3D printing, flight models, egg drop and more.

Inventions and Innovations

In this course, students will gain insights into the underlying fundamentals of technology through project- based learning. Students will also explore contemporary technological problems and invent new products or innovations as solutions. Students will utilize the design process through hands-on projects such as racers, rockets, structures a3D design and more.

Technological Systems

Students will explore, design, analyze and evaluate technological systems by simulating systems and assessing their impacts. Students will also explore occupational areas and technology-oriented careers. Students utilize the design process through hands-on projects such as dream house design, CO2 cars, water rockets, and others.

Building Technology 6, 7, 8

This course is designed to help students explore various technologies involved in the building process. Students will identify and learn to safely operate tools in the shop. Students will gain exposure to plumbing, carpentry and electrical operations and understand how these practices are involved in the building process.

Family & Consumer Sciences I, II, III (8208, 8263, 8244)

Students are exposed to family planning concepts concerning cooking, nutrition, housekeeping, personal finance, personal wellness, and consumer issues.

General Music 6, 7, 8 (9208, 9211, 9213)

Students explore areas related to music in the vocational (career-oriented outcomes), academic (music theory and history), belongingness (social interactions between students), and agency (self-esteem, motivation, and emotional development) domains to gain an appreciation and benefit of music.