# 2023-2024 <br> COURSE DESCRIPTION BOOK 



Questions?
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## UNION LOCAL HIGH SCHOOL GRADUATION REQUIREMENTS

| English Language Arts | 4 credits <br> Math <br> 4 <br> (must include Algebra II or the equivalent of Algebra II) |
| :--- | :--- |
| Science | 3 credits <br> (must include one unit of physical sciences, one unit of life sciences and one unit <br> of advanced study in one or more of the following sciences: chemistry, physics <br> or other physical science; advanced biology or other life science; astronomy, <br> physical geology or other earth or space science) |
|  | 3 credits |
| (must include World History, American History, and American Government) |  |

## STATE TESTING REQUIREMENTS

For the Class of 2023 \& Beyond:
Ohio's new graduation requirements consist of three key components:
A. Course Completion

Students will satisfy Ohio's curriculum requirements and any additional local requirements. Students will complete 21 credits, with specific units required in each content area.
B. Competency Demonstration

Students will demonstrate competency in the foundational areas of English language arts and mathematics or through alternative demonstrations, which include College Credit Plus, career-focused activities or military enlistment. Students must score 684 on the Algebra I and English II state test.
C. Readiness Demonstration

Students will demonstrate readiness for their post-high school paths by earning two seals that allow them to demonstrate important foundational and well-rounded academic and technical knowledge, professional skills, social and emotional competencies, and leadership and reasoning skills.
SEALS (Students must meet at least 2 seals. One seal must be a state-defined seal.) State-Defined Diploma Seals

1. Military Enlistment Seal
2. Technology Seal
3. Industry-Recognized Credential Seal
4. Citizenship Seal
5. OhioMeansJobsReadiness Seal
6. State Seal of Biliteracy
7. College-Ready Seal
8. Science Seal
9. Honors Diploma Seal

Locally Defined Diploma Seals
10. Community Service Seal
11. Student Engagement Seal
12. Fine and Performing Arts Seal

For more information: https://www.ulschools.com/Schoolcounselor OR Guidance Google Classrooms.

Class of 2024 class code: yik2s6h

Class of 2025 class code: nvf74vt
Class of 2026 class code: tibb36u

Class of 2027 class code: rc5xal7

# ENGLISH-LANGUAGE ARTS <br> **ALL students will be required to complete SUMMER reading for English courses. ** 

## ENGLISH LANGUAGE ARTS I

## Grade 9

1 Credit
This course is designed to help develop the basic skills involved in the study of English grammar and composition as well as literature and nonfiction. Emphasis will be on mastery of the writing process and skill development in grammar to provide a basis for instruction in usage and to facilitate the teaching of writing expository and argumentative essays. Students will read a minimum of 250 pages of independent reading in each 9 week grading period. Selections from an anthology of fiction, nonfiction, and poetry will be read, discussed, and used as a basis for writing practice.

## HONORS ENGLISH LANGUAGE ARTS I* <br> 115

## Grade 9

1 Credit Prerequisite: Grade of " $A$ " in $8^{\text {th }}$ grade ELA or " $B$ " with teacher recommendation
This course shares the same goals as English Language Arts I with a greater emphasis on upper level thinking skills through literature appreciation, writing skills and grammar review. Oral and written language skills as well as interpersonal skills will be emphasized. Outside reading and research will be required. Additionally, students will be required to read a minimum of 500 pages of independent reading per grading period.

## ENGLISH LANGUAGE ARTS II

## 121

## Grade 10

1 credit Prerequisite: English I
This course is an extension of General English I. Further mastery of the writing process with an emphasis on more complex types of writing will be covered. The study of grammar and the skills that promote better writing will also be a focus. The literature studied will include selections from the English II anthology. These selections will be discussed and used as a basis for writing assignments. This course will require a state end-of-course exam.

## HONORS ENGLISH LANGUAGE ARTS II* 125

Grade 10
1 Credit Prerequisite: "A" in CP/Honors English I or "B" with written teacher recommendation
This course is designed to place greater emphasis on upper level thinking skills through literature appreciation, writing skills and grammar review. Continued improvement of composition and communication skills as well as the development of a college-bound vocabulary will be emphasized. Outside reading and research will be required. This course will require a state end-of-course exam.

1 Credit Prerequisite: English II
This course is designed to develop an appreciation of American literature and authors as related to and affected by American History. The literature studied will provide a basis for discussions and composition assignments. Continued improvement of composition and communication skills including organization, sentence structure, word choice and mechanics will be emphasized throughout the year.

## HONORS ENGLISH LANGUAGE ARTS III*

## 133

## Grade 11

1 Credit Prerequisite: "A" in CP/Honors English II or "B" with written teacher recommendation
This course is designed to develop an appreciation and understanding of American literature and authors as related to and affected by American History. The literature studied will provide a basis for discussion and writing compositions. The class emphasizes improvement of composition and communication skills through various writing assignments, development of college bound vocabulary, and the study of American literature.

## ENGLISH LANGUAGE ARTS IV

## Grade 12

1 Credit Prerequisite: English III
This course is designed to develop an appreciation for British literature as related to and affected by British history. This course also uses contemporary literature. The literature studied will provide a basis for lectures, discussions and composition assignments. Continued improvement of composition and communication skills will be emphasized throughout the year. Job related skills and student participation in individual and group projects will be incorporated in this class.

## HONORS ENGLISH LANGUAGE ARTS IV*

## 141

Grade 12
1 Credit Prerequisite: "A" in CP/Honors English III or "B" with written teacher recommendation
This course is specifically designed for the student who plans to further his/her education following graduation. The course attempts to place the student as close to college standards as is possible in the high school situation. The study of composition and English literature is primarily emphasized. Essay testing is predominant. The study of vocabulary is continued and knowledge of research techniques is acquired. Each student writes a research paper.

Grades 11, 12
$1 / 4$ Credit -- 9 week course
Marvel Films is a class designed to study the history behind Marvel, its films, and its characters. Students will view, discuss, and analyze a variety of Marvel films, explore heroes and motivations, as well as create their own team of Heroes to defeat the evil villian.

## GREATEST FILMS

Grades 11, 12
$1 / 4$ Credit -- 9 week course
Greatest Films is a nine weeks course devoted to the study of a variety of classic and contemporary films considered to be great motion pictures of all time. Students will examine films from a variety of genres where they will view, discuss, and analyze the films, their contribution to the genre, and their importance to the industry.

## FILM AS LITERATURE

Grades 11, 12
$1 / 4$ Credit -- 9 week course
Film as Literature is the study of a variety of classic and contemporary motion pictures in an attempt to recognize their value as literary and cinematic art. Students will (1) view, discuss, and analyze films, (2) recognize and discuss specific film genres, (3) learn about the influence of culture, society and literature upon both classic and contemporary films, and (4) relate literary elements to film and society.

MYTHOLOGY
148
Grades 11, 12
$1 / 4$ Credit -- 9 week course
This class provides an exploration of classical Greek mythology including tales of Greek, Roman, and Norse origin. To reveal a variety of cultural thought, the following topics may be incorporated: creation/origin myths; gods and goddesses; heroes; the epics of Homer; monsters, lovers, and heroes; fairy tales; mythological allusions and influences in society. Edith Hamilton's Mythology will serve as the basic textbook for supplemental readings as well as Echoes from Mt. Olympus.

## JET MEDIA

## Grades 11, 12

1 Credit
In this course students will gain skills in one or more of the following areas: page design, advanced publishing techniques, copywriting, editing and photography while producing a creative, innovative yearbook which records school memories and events.

## MATHEMATICS

## ALGEBRA I

415
Grades 9, 10, 11, 12
1 Credit
Students will describe patterns, use formulas, describe variables, graph linear equations and inequalities, and set up and solve problems using the language of mathematics. This course will require a state end-of-course exam.

## HONORS ALGEBRA I* <br> Grades 9, 10, 11, 12 <br> 1 Credit Prerequisite: "A" in 8th Grade Math or "B" with written teacher recommendation

College Prep Algebra I is a course designed primarily for the student who will later enter college. Students will describe patterns, use formulas, describe variables, graph linear equations and inequalities, and set up and solve problems using the language of mathematics. This is an accelerated course; therefore, students will be expected to incorporate upper level thinking skills and provide more in-depth analysis in written form. This course will require a state end-of-course exam.

## PLANE GEOMETRY

Grades 9, 10, 11, 12
1 Credit Prerequisite: Algebra I
This is a standard level course in Geometry. In this course, students will study the concepts and applications of plane, solid, and coordinate Geometry. Topics covered include points, lines, planes, definitions, postulates, theorems, formal two-column proofs, conditional statements, angles, polygons, congruence, similarity, surface area, volume, logic, coordinate geometry, circles, and transformations. This course will require a state end-of-course exam.

## HONORS GEOMETRY*

422
Grades 9, 10, 11, 12
1 Credit Prerequisite: "A" in CP/Honors Algebra I or "B" with written teacher recommendation
Through this course students will study the concepts and applications of plane, solid, and coordinate Geometry. Topics covered include: points, lines, planes, definitions, postulates, theorems, conditional statements, angles, polygons, congruence, similarity, surface area, volume, logic, coordinate geometry, circles, and transformations. Also, a traditional part of any geometry course is to develop students' ability to reason carefully and to write mathematical proofs. Because this is an accelerated course, students will be expected to incorporate upper level thinking skills and provide more in-depth analysis in written form. This course will require a state end-of-course exam.

Grades 10, 11, 12
1 Credit Prerequisite: Plane Geometry
This course is designed to complete the basic background in algebraic structure and manipulation initiated in Algebra I. The topics from Algebra I will be expanded and additional topics will be explored. Additional emphasis will be placed on function, quadratics, variations, logarithms, exponential functions, sequences, series, and the Binomial Theorem.

## HONORS ALGEBRA II*

Grades 10, 11, 12
1 Credit Prerequisite: "A" in CP/Honors Geometry or "B" with written teacher recommendation
This course is designed to complete the basic background in algebraic structure and manipulation initiated in Algebra I. The topics from Algebra I will be expanded and additional topics will be explored. Additional emphasis will be placed on functions, quadratics, variations, logarithms, exponential functions, sequences, series, and the Binomial Theorem. This is an accelerated course; therefore, students will be expected to incorporate upper level thinking skills and provide more in-depth analysis in written form.

## FINANCIAL ALGEBRA

440

## Grades 11, 12

1 Credit
This course is created by combining algebraic and graphical math problems with practical business and personal financial applications. This course includes the decision making process, financial aspects of career planning, financial management, income analysis, budgeting techniques, savings and investment strategies in order to meet short and long term goals, evaluation of services offered by financial institutions, management of credit cards and debt, risk analysis, fraud and financial loss. Students will learn work readiness skills to prepare them for career and college. Specific topics include banking, checking, budgeting, mortgages, credit cards, and auto insurance.

PRE-CALCULUS*
Grades 11, 12
1 Credit Prerequisite: "A" in CP/Honors Algebra II or "B" with written teacher recommendation
This course is designed for the student who plans further study in mathematics or science. Upon completion, the student will be able to move into an elementary course in Calculus. Topics covered will include: functions, logarithms, exponential functions, polynomials, analytical geometry, trigonometry, matrices, conics, vectors, and polar coordinates.

## CALCULUS*

Grade 12
1 Credit Prerequisite: " $A$ " in Advanced Math/Pre-Calculus or " $B$ " with written teacher recommendation
Calculus is geared to the college bound student. It expands the basic concepts of limits, derivatives, and integrals as presented in advanced math and delves deeply into limits of functions, differentiation and antidifferentiation and integration. Upon completion, the student will be prepared for Calculus at the college level.

## SCIENCE

## INTEGRATED SCIENCE

313

## Grade 9

1 Credit
This course is designed as an introduction to basic principles of chemistry and physics. The course will also involve concepts applicable to a fuller understanding of Earth/Space Science. The course will stress an inquiry approach with strong emphasis on laboratory exploration. Another goal will be to provide a degree of scientific literacy. Technological and social aspects of science will also be introduced along with biological, environmental, and earth science aspects associated with the proficiency tests.

HONORS INTEGRATED SCIENCE*
Grade 9
1 Credit Prerequisite: "A" in 8th Grade Science or "B" with written teacher recommendation
This course is an extensive study of the principles of Chemistry and Physics for students who plan to attend college. The course will include developing an in-depth understanding of Earth/Space science. Goals of the course include expanding the knowledge and skills correlated with scientific inquiry, and technological and social aspects of Science. This course will contain lab experiments and projects geared towards accomplishing the goals of the curriculum.

## BIOLOGY

Grade 10, 11, 12
1 Credit Prerequisite: Integrated Science
Biology explores the science of life. The purpose of biology is to investigate and study the interrelationships of living things and their environmental adaptations. The students will learn the fundamental biological concepts at the beginning of the course. From these concepts, the student will progress from the cell to protists, to plants and animals and to man. The study of man will include all systems of man such as the nervous, skeletal, circulatory, digestive, respiratory, and muscular. Biology will serve as a basis for understanding the significance of life through science. For students who plan to go to a technical school or college, biology will serve as a background and a beginning in the field of science. This course will require a state end-of-course exam.

## HONORS BIOLOGY*

 323Grades 10, 11, 12
1 Credit Prerequisite: Grade of "A" or "B" in Integrated Science, completing Algebra I.
This course is designed to explore the life of all the different organisms and the 5 kingdoms. The student will be introduced to the fundamentals of biological principles and then expand into some abstract concepts. This course is fast moving and will contain labs for the students. This class is for students who plan to go to college. The class will serve as a background and a beginning in the field of science. This course will require a state end-of-course exam.

Grade 11, 12
1 Credit Prerequisite: Integrated Science and Biology
Global Science is a course that offers a vast array of science topics. This course includes the following categories: life science, earth science, chemistry, physics, and physical science. This course is offered as an alternative to chemistry during the $11^{\text {th }}$ grade. All aspects of the world in which we live will be explored in this one general course. The students will have been introduced to space, the importance of water, economic factors related to science, energy around us, natural resources and the environment.

CHEMISTRY*
Grades 11, 12
1 Credit Prerequisite: Biology and Algebra I
This course stresses the most fundamental concepts of chemistry: atomic structure, chemical bonding, chemical mechanisms, chemical calculations, and other basic laws of matter. The laboratory experience is set up to provide a physical basis for various chemical laws and theories; practical experiments are also conducted. Students have some definite reason (college preparation, nurses training, etc.) for taking this course. A basic knowledge of algebra is essential for success.

## PHYSIOLOGY*

## 2333

## Grade 11, 12 <br> $1 / 2$ Credit Prerequisite: Chemistry or taking Chemistry, A or B in CP/Honors Biology

In this semester class we will go into major detail regarding certain systems of the body. For example: circulatory, urinary, muscular and nervous systems. Students will also receive a vast outlook into the study of histology and cellular respiration. Students will be expected to memorize vast amounts of information over the semester. All students must be willing to dissect a cat as part of the semester grade. This course carries a weighted grade point average and is therefore challenging. Students should have earned an A or B in College Prep Biology in order to take this course.

## GENETICS*

Grades 11, 12
$1 / 2$ Credit Prerequisite: Chemistry or taking Chemistry, A or B in CP/Honors Biology
In this semester class we will review the basic genetic concepts including: monohybrid and dihybrid crosses, punnett squares, pedigrees, chromosomes, and DNA. This class will include an extensive lab dealing with genetic crosses and performing experiments with fruit flies. All students will be expected to understand some basic statistical math and biology concepts. This course carries a weighted grade point average and is therefore challenging. Students should have earned an A or B in College Prep Biology in order to take this course.

Grade 12
1 Credit Prerequisite: Chemistry I
This is a year long course designed for the student who desires additional background in the areas of inorganic and organic chemistry. The course will deal chiefly with advanced concepts of atomic theory, chemical bonding, chemical kinetics, equilibrium, oxidation - reduction, and organic chemistry. It will be most helpful to those students whose career plans include the medical field or to college bound individuals especially those majoring in science or math. To enroll a student should have completed Chemistry I and two years of algebra. A student may take Chemistry II and Algebra II simultaneously.

PHYSICS*
Grade 11, 12
1 Credit Prerequisite: Chemistry and Algebra II
This course spans the various fields of physics such as mechanics, heat, sound, light, electricity, and nuclear physics. Graphing physical relationships and deriving formulas from these graphs are an integral part of the laboratory session. Physics enables the student to understand the laws which govern the universe. Students desiring to enroll should have the following skills: be adept in math, be relatively successful in other sciences, have knowledge of chemistry.

## SOCIAL STUDIES

## WORLD STUDIES <br> 215

## Grade 9 <br> 1 Credit

This course covers the study of the world from 1750 to the Present, the Age of Revolutions through the $20^{\text {th }}$ century. Ninth-grade students continue the chronological study of world history. This study incorporates each of the seven standards. As students study historic eras, they consider the influence of geographic settings, cultural perspectives, economic systems and various forms of government. Students gain a deeper understanding of the role of citizens and continue to develop their research skills.

## HONORS WORLD STUDIES* <br> 216

## Grade 9

1 Credit Prerequisite: "A" in 8th Grade Social Studies or "B" with written teacher recommendation
This course covers the same historic eras as World Studies but requires a more extensive approach to the understanding of the events that shaped our world. This course is designed to prepare students in developing the research and critical thinking skills necessary to attend a 4 -year college. Students will use primary documents, projects, and individual research in understanding historical events. This course requires self-motivation as well as above average intellectual development.

## AMERICAN HISTORY

## Grade 10

1 Credit
Without history, we have no knowledge of who we are or how we came to be. This course will be an attempt to answer these questions. Intelligent action is based upon learning from past experience and in our Republic, intelligent action is most essential. Thus it is in history of one sort or another that we must seek whatever answers we may hope to find about the conduct of human affairs. This course will require a state end-of-course exam.

## HONORS AMERICAN HISTORY*

Grade 10
1 Credit Prerequisite: "A" in CP/Honors World Studies or "B" with written teacher recommendation
This course covers American history from U. S. Industrialization to the present. The course is designed to facilitate critical thinking, advanced reading comprehension, and note taking skills. By analyzing crucial events in our history, students can better understand our past while gaining essential skills necessary for college. The course provides a detailed explanation of important events in American history from the later half of the $19^{\text {th }}$ through the $20^{\text {th }}$ century. This course will require a state end-of-course exam.

Grade 11
1 Credit
This course studies the basic foundation and structure of American Government. This course is aligned with the topics covered on the exam given by the state of Ohio. This course involves the study of the government of the United States on the federal, state, and local levels. It will cover the creation of our Constitution and the application of our 27 Amendments. This course will study the changes to the Ohio Constitution, the basics of Ohio Government and how Ohio's government is similarly structured to the Federal Government. This course will require a state end-of-course exam.

## HONORS GOVERNMENT*

Grade 11
1 Credit Prerequisite: "A" in CP/Honors American History or "B" with written teacher recommendation
This course studies the basic foundation and structure of American Government. In order to create college preparedness, this course is designed to promote critical thinking, to advance reading comprehension of primary sources and to extend note taking skills. This course will require more research based projects, independent study assignments, and more extended writing assignments from students. This course is aligned with the topics covered on the exam given by the state of Ohio. This course involves the study of the government of the United States on the federal, state, and local levels. It will cover the creation of our Constitution and the application of our 27 Amendments. This course will require a state end-of-course exam.

## PSYCHOLOGY

Grades 11, 12
1/2 Credit—semester course
Psychology is the study of behavior and the mind. This course will cover the human personality, intelligence and how human biology, heredity, and environment affect behavior. Students will not only study personality theory and the causes of abnormal personality, but will focus on self-evaluation and personal growth. These objectives will be met by the use of various projects and activities designed to enhance student awareness.

## HISTORY OF WORLD WAR I AND WORLD WAR II 255

Grades 11, 12
1/2 Credit -- semester course
This course examines World War I and World War II in great detail. Students will participate in a variety of projects and activities which are researched based to gain a more in depth understanding of each conflict. The course discusses in depth the key people, battles, and events which shape each conflict.

Grades 11, 12
$1 / 4$ Credit -- 9 week course
This course will explore conspiracy theories and unsolved mysteries throughout history. This class will explore the role that fear and anxiety play in our social and political lives in connection to these theories and mysteries. Students will explore subjects from aliens to music/pop culture to assassinations and government plots. This course will focus on research, debate and presentations and will allow students to be responsible for verbal and written reports along with visual projects.

## FILM AS HISTORY

Grades 11, 12
$1 / 4$ Credit -- 9 week course
In this course students will be watching movies, tv series, and documentaries that depict historical events. Students will study the movie's accuracy in their portrayal of facts and their effectiveness in depicting the event. Students will review movies and discuss their portrayal in context of the time frame. Students will research the accuracy of the movie (dress, technology, etc) and write a review upon watching it.

## CRIMINAL JUSTICE

Grades 11, 12
1 Credit
This course traces the history, organization, and functions of local, state, and federal law enforcement. Students will study criminal behavior and apply constitutional and criminal law to crime and punishment. Students will learn law enforcement terminology, classifications and elements of crime, and how various court systems are used to judge and punish offenders.

SOCIOLOGY 260
Grades 11, 12
$1 / 2$ Credit -- semester
The study of social relationships, institutions, and group behavior in societies. These objectives will be met by the use of various projects and activities designed to enhance student awareness.

## ABNORMAL PSYCHOLOGY

261
Grades 11, 12
$1 / 4$ Credit - 9 week course
This course is designed to examine abnormal behavior through psychology. The class will study psychological disorders, examine manipulative behavior through cults and examine serial crimes of individuals suffering from psychological disorders.

## FOREIGN LANGUAGE

## SPANISH I

511
Grades 9, 10, 11, 12
1 Credit Prerequisite: a final minimum grade of " $B$ " in $8^{\text {th }}$ grade English
This first year course is designed to introduce students to many aspects of Hispanic culture, with an emphasis placed on verbal and written communications in the Spanish language. At the end of the year, students will be able to express and comprehend simple thoughts in the target language. In addition, students will be encouraged to develop culturally relative attitudes through study of Hispanic culture and the similarities and differences that it shares with; the American culture.

## SPANISH II

## 521

Grades 10, 11, 12
1 Credit Prerequisite: Spanish I with a final minimum grade of "C"
The second year course, following an extensive review of skills learned in the first year, will broaden and deepen the student's linguistic experience. While still emphasizing the spoken language, more attention will be paid to verbs and verb tense structures. Frequent dictation exercises will be given and students will be required to speak and write simple conversational Spanish coherently.

## SPANISH III*

2531
Grades 11, 12
1 Credit Prerequisite: Spanish II with a final minimum grade of "C"
Spanish III is less structured than Spanish I or II. The students will be expected to converse and write relatively freely in Spanish and will be responsible for various outside reports (on short stories, newspaper articles, cultural observations) of their own choosing. The class will be conducted as exclusively in Spanish as is possible. Again, oral skills will be emphasized, but with less reliance on texts and structural situations than in Spanish I and Spanish II.

## SPANISH IV*

2541

## Grade 12

1 Credit Prerequisite: Spanish III with a final minimum grade of "C" Spanish IV is a year-long concentration of perfecting the student's writing skills. The students will have several writing assignments per week. Students will need to learn new vocabulary and grammar structures associated with the assigned paragraphs and compositions.

# HEALTH/PHYSICAL EDUCATION 

## PHYSICAL EDUCATION

850

## Grades 9, 10, 11, 12

$1 / 4$ Credit - Semester
The physical education program provides each student with an opportunity to develop skill and understanding in a variety of sports activities that will serve that person throughout life. Areas of concern in the physical education program are the development of increased strengths and endurance, better motor skills, improved health practices, knowledge of the rules of a sport, and socialization of the individual. Examples of the activities that we offer include volleyball, softball, flag football, hockey, aerobics, bowling, basketball, and physical fitness. These are just a few of the many activities covered throughout the course.

## HEALTH

831
Grade 10
$1 / 2$ Credit - Semester
This health program is designed to assist the individual in developing proper understanding, proper attitudes, and proper habits concerning a person during his growth years. Several aspects of health that are studied include: the human body and its systems, various diseases and their causes including sexually transmitted diseases with emphasis on AIDS, nutrition, alcohol, and other drugs, and personal health habits.

## WEIGHT TRAINING

860/861
Grades 10, 11, 12
$1 / 2$ Credit -- Semester
An introductory course designed to help each student improve muscular strength, gain knowledge, and understanding of weight training theory and practice.

## ART

## ART I

## Grades 9, 10, 11, 12

1 Credit
This first year of art is a basic course for beginning art students in 2 dimensional art with the following projects: Graphite portraiture, Pastels, Slate drawing, scratchboard and acrylic painting. Problems in color mixing, color values, and color schemes including greyscale shading are presented with multiple solutions addressed. Elements of line, space, form, color, value, texture, and shape are presented as per state curriculum by using Art Textbooks which includes study guides and tests after each chapter learned. Art History will be introduced throughout the year with the end of the year exam.

## ART II

## Grades 10, 11, 12

1 Credit Prerequisite: Art I
This course is designed for those students who have a good understanding of the basic fundamentals of art. Art II students are expected to carry out advanced compositions in Watercolor, Charcoal, Clayboard and Acrylics. Using various media, the students are encouraged to create through original self-expressionism. Elements of line, space, form, color, value, texture, and shape are used from the previous year along with the principles of rhythm, balance and proportion, emphasis, contrast, unity, and pattern that will be presented for better pictorial composition. Contests and shows are available to the students whose work is exemplary in each media above throughout the year.

## ART III \& ART IV

941/951
Grades 11, 12
1 Credit Prerequisite: Art I \& II
By using knowledge from the past two courses, students may work in sculpture, free form shapes, paintings, and drawings from the basic art elements and principles. Portfolio work is included along with many contests and art shows held throughout the year. Use of computers in Adobe Photoshop will be used to create original works for inspiration along with manipulating works in various filters. Inspiration will be encouraged by using various themed Photography assignments throughout the year along with inspiration boards each child will create for each 9 weeks period.
Students are encouraged to progress in their talents and skill set, not digress in their abilities with their time spent on projects. At this level students will follow a rubric given at the beginning of the year as to what makes for an outstanding original project and the decisions they will make in order to help in their decision making process.
Students are expected to budget their time wisely on each project and have a progression or growth of $15 \%$ or more for each week, which will be given as their weekly work effort grade. Art 3 's final is a comprehensive exam that goes over the Art Elements and Principles of design as well as questions asked over basic drawing information.

Art 4 will present an end of the year portfolio which is a comprehensive showing of their artwork over the past four years. This portfolio is their end of the year final in which they must create this portfolio from scratch and present it in either digital or hard copy form.

STUDIO ART
961
Grades 11, 12
1 Credit
This course is a self-led extracurricular course for current students enrolled in Art III and Art IV. It is a self-paced class that gives students an extra period of seat time to work on current projects in the art room and grades will be given for the progress of each week. Students are expected to budget their time wisely on each project and have a progression or growth of $15 \%$ or more for each week, which will be given as their weekly work effort grade.

# MUSIC 

MUSICAL THEATRE
902/903
Grades 9, 10, 11, 12
$1 / 2$ Credit
An examination of the history and development of the musical theatre genre. Theory and practice in the art of creating a believable character for stage; as well as physical and vocal skills needed for acting and singing. Emphasis on the organization and staging of contemporary musical theatre, choosing scripts, pre-production planning and integration of music and dance with book scenes. Students will learn and apply their skills for dealing with styles and techniques of performing for the musical theatre. Students will learn to prepare and stage musical scenes for a class project.

## HISTORY OF ROCK \& ROLL

942/943
Grades 11, 12
$1 / 2$ Credit each
This course will explore the history of Rock \& Roll based on the Rock \& Roll Hall of Fame Visual Timeline. Material and media for this course will include audio recordings, videos, internet information, and distance learning in conjunction with The Rock \& Roll Hall of Fame. Student performance of concepts will be encouraged and if possible there will be a field trip to the Rock \& Roll Hall of Fame in Cleveland.

## CHOIR

948 / 949
Grades 9, 10, 11, 12
$1 / 2$ Credit each
All students must audition for this training and performance program. Students will learn a variety of music and perform for special occasions and concerts. Students are required to attend all performances unless excused by the choir director.

## BAND

Grades 9, 10, 11, 12
1 Credit
The Union Local Senior High Band programs a performance-based course consisting of marching band and concert band. By virtue of the fact that this is a performance-based class, students will be required to participate outside of the regular school day. Union Local's marching band is organized during the summer and performs at varsity football games as well as at parades, competitions, and festivals throughout the year. The concert band is made up of marching band and band members who were football players during football season. The only exception to the above is the band members who are selected to participate in the Concert band.

Grades 9, 10, 11, 12
1 Credit

## CAREER TECH: ENGINEERING \& SCIENCE TECHNOLOGIES

(There is an opportunity to earn college credit through Rochester Institute of Technology) Students can earn the Technology Seal through any of the following courses:

ENGINEERING ESSENTIALS*
710
Grades 9, 10, 11, 12
1 credit
This course is designed as a first-exposure experience to inspire students of all backgrounds to explore the breadth of engineering-related career opportunities. Throughout the course, students explore global engineering, and the variety of career paths available to them. Engineering Essentials is geared toward a first-year engineering high school student.

COMPUTER AIDED DESIGN AND 3D PRINTING*
Grades 9, 10, 11, 12
1 credit
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3D modeling software (CAD) and 3D printers (formerly Intro to Engineering).

## STRUCTURES, MATERIALS, AND AUTOMATION ROBOTICS* 712

Grades 9, 10, 11, 12
1 credit Prerequisite: Must be taking CP Geometry (or have credit)
Through problems that engage and challenge, students explore a broad range of engineering topics, including robotics, mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation (formerly Principles of Engineering) .

## DIGITAL ELECTRONICS* 713 <br> Grades 11, 12 <br> 1 credit

From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

COMPUTER INTEGRATED MANUFACTURING* 714
Grades 11, 12
1 credit Prerequisite: Digital Electronics and Structures, Materials, and Automation Robotics)
Students discover and explore manufacturing processes, product design, robotics, and automation. Then they apply what they have learned to design solutions for real-world manufacturing problems.

# CAREER TECH: AGRICULTURE <br> Highlighted courses will be offered for the 23-24 school year. 

AGRICULTURE, FOOD, AND NATURAL RESOURCES
Grades 9, 10, 11
$11 / 4$ Credit
This first course in the career field is an introduction to Agricultural and Environmental Systems. Students will be introduced to the scope of the Agricultural and Environmental Systems career field. Students will examine principles of food science, natural resource management, animal science \& management, plant \& horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Through the course, students will develop communication, leadership and business skills essential to the agriculture industry.

## ANIMAL AND PLANT SCIENCE

## 802

## Grades 10, 11, 12

$11 / 4$ Credit
This course is for 2 nd year Ag students. Students will apply knowledge of animal and plant science to the agriculture industry. They will be introduced to the value of production animals relative to the agricultural marketplace. Students will engage in animal classification and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies and growing environment on plant production. Throughout the course, business principles and professional skills will be examined.

## GREENHOUSE MANAGEMENT

Grades 11, 12
$11 / 4$ Credit Prerequisite: Ag, Food, and Natural Resources
Students will learn the operational practices needed for the successful growth of nursery stock and/or greenhouse plants. They will learn essential greenhouse practices including water and fertilizer distribution, lighting, ventilation and temperature control. Students will learn pest and disease identification and control along with bio-security practices. Students will demonstrate knowledge of propagation methods, plant health, nutrition, and growth stimulation. Throughout this course, business and employability skills will be emphasized.

SCIENCE AND TECHNOLOGY OF FOOD 804
Grades 11, 12
$11 / 4$ Credit Prerequisite: Ag, Food, and Natural Resources
This course examines the research, marketing, processing and packaging techniques applied to the development of food products. Learners will examine principles of food preservation techniques and determine correlations to food sensory, shelf life and food stability. Learners will examine and develop food safety, sanitation, and quality assurance protocol. Government regulations and food legislation will be examined and the implications to food science and technology will be identified.

# BUSINESS MANAGEMENT FOR AGRICULTURAL \& ENVIRONMENTAL SYSTEMS 

Grades 11, 12
805
$11 / 4$ Credit
Students will examine elements of business, identify organizational structures and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing business. Learners will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implications of business regulations will be identified.

## LIVESTOCK SELECTION, NUTRITION \& MANAGEMENT

Grades 11, 12
1 ¼ Credit Prerequisite: Ag, Food, \& Natural Resources
Students will identify and apply principles and routine husbandry practices to production animal populations. Topics will include principles of nutrition, feed utilization, animal welfare, selection and management of facilities and herd populations, students will apply knowledge of production animal care to enhance animal growth, selection of breeding stock, and management practices. Throughout the course, students will develop management plans reflecting practices for care and legal compliance.

## ANIMAL HEALTH

Grades 11, 12
$11 / 4$ Credit 807

## Prerequisite: Ag, Food, \& Natural Resources and Animal \& Plant Science

Learners will apply principles of nutritional management for various classes of animals. Learners will analyze nutritional content/quality of feeds; formulate rations; develop feeding recommendations; identify deficiency symptoms and implement corrective methods as needed. Care/management plans are developed that reflect the classification of animals and follow best practices and legal compliance. Learners will monitor/evaluate the quality of animal habitats and estimate carrying capacity as it relates to the impact of the environment and animal health.

## AGRICULTURE LEADERSHIP CAPSTONE 813 Grade 12 <br> $11 / 4$ Credit

Students apply agricultural knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, and internships.

## CAREER TECH: MECHANICAL PRINCIPLES

MECHANICAL PRINCIPLES I<br>Grades 9, 10, 11, \& 12<br>$11 / 4$ Credit

Students will engage in the mechanical principles utilized in animal and plant production systems. They will learn electrical theory, design, wiring, hydraulic and pneumatic theory, along with metallurgy in relation to hot and cold metals. Students will apply knowledge of sheet metal fabrication applicable to the agricultural industry along with identifying, diagnosing, and maintaining small air-cooled engines. Throughout the course, students will learn critical components of site and personal safety as well as communication and leadership skills.
(Due to lab equipment, class size is limited to $\mathbf{1 2}$ students per section)

## MECHANICAL PRINCIPLES II

809
Grades 10, 11, \& 12
$11 / 4$ Credit Prerequisite: Mechanical Principles I
Students will engage in the mechanical principles utilized in animal and plant production systems. Students will apply knowledge of sheet metal fabrication applicable to the agricultural industry. They will further learn the operations of SMAW and GMAW welding equipment, materials, and operations. Throughout the course students will practice/perform critical components of site and personal safety as well as communication and leadership skills, through project based learning. Students will also apply principles of engineering and design along with an understanding of the properties and uses of construction materials to buildings and structures used in agriculture, horticulture and natural resources.
(Due to lab equipment, class size is limited to $\mathbf{1 2}$ students per section)
MECHANICAL PRINCIPLES III
810
Grades 11, \& 12
$11 / 4$ Credit Prerequisite: Mechanical Principles II
Students will demonstrate prior knowledge in metallurgy, in relation to hot and cold metals. They will continue learning and practicing all welding procedures, along with the safety and operations of Plasma Arc cutting, brazing, and soldering. Throughout the course students will learn critical components of site and personal safety as well as communication and leadership skills. Students will apply principles of engineering and design along with an understanding of the properties and uses of construction materials to buildings and structures used in agriculture, horticulture and natural resources. Throughout the course students will learn critical components of site and personal safety as well as communication and leadership skills.

## Grade 12

$11 / 4$ Credit Prerequisite: Mechanical Principles III
Students apply Mechanical Principles program knowledge and skills in a more comprehensive and authentic way. Students will pursue independent research on a project of their choice- with the guidance of the instructor - produce a substantial project that reflects a deep understanding of the skills used. Mechanical Principles IV may also consist of learning opportunities that occur both in and away from school. Under supervision of the school and through partnerships, students combine classroom learning with work experience to benefit themselves and others. These can take the form of mentorship employment, cooperative education, apprenticeships and internships.

## FORESTRY \& WOODLAND ECOSYSTEMS

## Grades 11, 12

1 $1 / 4$ Credit $\quad$ Prerequisite: Mechanical Principles I
Students will apply principles of botany, dendrology and silviculture to the management of forests and forest ecosystems. They will apply principles of timber cruising with surveying and mapping techniques to take forest measurements. Learners will develop the knowledge and skills necessary for forest reforestation, timber stand improvement, timber harvesting and forest product utilization. Learners will operate and maintain forestry equipment, apply fire management practices, and understand related regulations, laws, and policy issues.

## CAREER TECH: EXERCISE SCIENCE

## EXERCISE SCIENCE AND ATHLETIC TRAINING <br> Grades: 9, 10, 11, 12 <br> 1 Credit

In this, first course students will apply procedures and techniques used in athletic training and in the care and rehabilitation of athletic injuries and therapeutic exercise. Topics include injury prevention, conditioning, and wound care techniques of the musculoskeletal system. Students will learn techniques in the analysis of mechanical factors related to human movement. In addition, current trends, technology, legal considerations, and the role of exercise science in relationship to other health fields will be emphasized.

NUTRITION AND WELLNESS 342
Grades: 10, 11, 12
1 Credit Prerequisite: Exercise Science \& Athletic Training and Nutrition \& Wellness
Students will increase their knowledge of comprehensive health and wellness. Students will be able to identify the components of fitness and communicate the relationship between physical fitness, physical performance, injury prevention, and nutritional intake. Students will evaluate an individual's state of nutrition based upon the impact of personal choices and social, scientific, psychological and environmental influences. Further, students will calculate an individual's kilocalorie burn rate and recommend an ideal diet and physical fitness plan.

## ATHLETIC INJURIES \& PREVENTION

Grades: 11, 12
1 Credit
Prerequisite: Exercise Science \& Athletic Training
Students will identify signs and symptoms of injury and apply emergency procedures and techniques used in the immediate care of athletic-related trauma. Students will learn clinical and field evaluative processes, injury prevention techniques, conditioning techniques, treatment, taping, bracing, and rehabilitation of musculoskeletal injuries and conditions. Students will design and implement conditioning programs, including nutritional considerations and ergogenic aids. Emphasis is placed on the synthesis of information gathered through injury history, observation, and manual muscle testing.

## MEDICAL TERMINOLOGY

Grades: 11, 12
1 Credit
Prerequisite: Biology or CP Biology
This course focuses on the applications of the rules for constructing and defining medical terms with an emphasis on building a working medical vocabulary. Topics include using the appropriate abbreviations and symbols for anatomical, physiological and pathological classifications and the associated medical specialties and procedures. Students will decipher medical terms by identifying and using word elements with an emphasis on derivation, meaning, and pronunciation. Further, students will interpret and translate medical records and documents.

## CAREER TECH: INFORMATION TECHNOLOGY/INTERACTIVE MEDIA

## INFORMATION TECHNOLOGY I

Grades 9, 10, 11, 12
$1 / 2$ Credit - 1 semester
This first course in the IT career field is designed to provide students with a working knowledge of computer concepts and essential skills necessary for work and communication in today's society. Students will learn safety, security, and ethical issues in computing and social networking. Students will also learn about input/output systems, computer hardware and operating systems, and office applications.

## DESIGN TECHNIQUES

455
Grades 10, 11, 12
1 Credit
Students will learn techniques for transforming photographic images, through use of digital cameras, computers, and mobile devices. To accomplish this, they will learn software photo editing techniques including layering, color correction, masking, and special effects using current commercial and open source programs and applications.

## CREATING \& EDITING DIGITAL GRAPHICS

## Grades 11, 12

1 Credit
Students will learn to design, develop, and produce interactive media projects, web sites, and social media contexts. Students will demonstrate methods of creating professional quality media using commercial and open source software.

## VIDEO \& SOUND

## Grades 11, 12

1 Credit
Students will create professional video and audio productions for distribution in traditional and new media channels. Students will plan, produce, edit, and launch media products. Students will develop scripts and storyboards, compose shots and operate cameras, capture sounds using microphone hardware, apply special effect techniques, and edit to achieve the final product. Students will be able to use animation and graphic design for video.

## ANIMATION

458

## Grades 11, 12

1 Credit
Students will use animation and storyboarding techniques to plan the production of an animation project. Students will design from script and storyboard actions in the pre-production planning process. Students will use commercial and open source digital animation software to create finished animations, cartoons, and other short movies. They will accomplish this using animated text, character movements, voice, background sound, sound effects, camera movements, and multiple scenes.

## BUSINESS

## ACCOUNTING I

Grades 11, 12
1 Credit
Students will learn to begin or set up an accounting system. They will record transactions in journals, transfer data from journals to ledgers, complete a worksheet to compute net income or net loss, prepare income statements and balance sheets, and close the records for the accounting period. They will work with records for a proprietorship and a partnership for both service and merchandising businesses. Payrolls will be computed. Voucher, petty cash, and inventory systems will be covered. Business simulations will be completed. Accounting should be taken by students who want to become accountants or CPA's, students majoring in business, or students who plan to have a business of their own one day.

## FINANCIAL LITERACY

## PERSONAL FINANCE <br> Grades 10, 11, 12 <br> $1 / 2$ Credit

Personal Finance is a semester-length elective designed to help high school students prepare for success in making financial decisions throughout their lives. Topics in the course address the advantages of making sound financial decisions in both the short and long term, income planning, money management, saving and investing, and consumer rights and responsibilities.

## ACT PREP

## ACT PREPARATION CLASS

Grades 10, 11, 12
$1 / 2$ Credit
The ACT preparation class is self-paced and covers all the subject areas that are found on the ACT, including: English, Reading, Math, and Science Reasoning. Each student will take assessment tests for each of the 4 subject areas. The assessment tests will help define those areas in which a student needs to focus their attention. The results of the assessment test will help determine a plan of study, based upon the student's individual needs. This will enable the student to work on their "weak" areas and maximize their total ACT score. The class will also give the student test taking strategies that have been demonstrated to increase ACT scores. The class includes computer interaction.

## WORK RELEASE

## JOB SKILLS

Grade 12 1 Credit
Seniors must take at least 5 credits (this includes Job Skills) in order to do work release. Students must complete paperwork and submit proof of work at the end of each 9 week grading period.

# COLLEGE CREDIT PLUS <br> Union Local High School offers 8 college credit plus courses in-house. <br> For more information or for any questions, please contact Mrs. Eberhart at reberhart@ulschools.com or call 740-782-1181 ext 3919. <br> Students can also take college credit plus courses at OUE and/or Belmont College. 

## BELMONT COLLEGE

(The following 4 courses count as English credits)
COMPOSITION I*

## ENG 1110

Grades: 7-12
1 HS Credit/3 college credit hours
Fundamentals of rhetoric and writing academic essays: standard expository writing utilizing narrative, descriptive, evaluative, and persuasive strategies, taught in a computer-lab setting or online, emphasizing revising and rewriting.

COMPOSITION II*
Grades: 7-12
1 HS Credit/3 college credit hours Prerequisite: ENG 1110
Exploration of a detailed research process, including the writing of two short essays, culminating in production of a substantive documented research paper. Students use multiple sources, including electronics, through OhioLink and Internet-based research.

EXPERIENCING LITERATURE*
Grades: 7-12
1 HS Credit/3 college credit hours Prerequisite: ENG 1110
A practical approach to thematic interpretation. Students will give written expression to the meaning of thematic elements and their relations outside the works of literature. Students write both individually and within a collaborative process, learning to develop ideas in relation to literature and in relation to the ideas of other people. They gain experience in both accepting and challenging ideas available in literature and in the responses of others. Readings are selected from some of the following genres in American and world literatures: short story, novel, film, drama, poetry, and essay. The course is taught within a selected thematic framework.

## SPEECH*

## COM 1115

Grades: 7-12
1 HS Credit/3 college credit hours
Study of the elements of good speech, with emphasis on speaking to inform or persuade. A variety of speaking experiences will be provided, ranging from individual presentations to group discussions.
(The following 4 courses will count as math credits. We will offer 2 of the 4 based on interest.)

## ALLIED HEALTH MATH

MAT 1110

## Grades 7-12

1 HS Credit/3 college credit hours
This course is intended for health technology students and others with the need to use mathematics in the solution of pharmacological problems. Topics include a review of basic arithmetic skills and systems of measurement. Problems related to dosage calculations include oral, parenteral, and intravenous, as well as specialized calculations.

## STATISTICS

MAT 1120

## Grades 7-12

1 HS Credit/4 college credit hours
Descriptive statistics: graphing, histograms, frequency distributions. Measures of central tendency: mean, median, mode. Measures of variation: standard deviation, variance, coefficient of variation. Probability of events: simple, compound, independent, mutually exclusive. Study of distributions: probability, binomial, normal and sampling. Chebyshev's Theorem, Empirical Rule, Central Limit Theorem, estimation, hypothesis testing, correlation and regression.

## MATH FOR LIBERAL ARTS

## MAT 1128

## Grades 7-12

1 HS Credit/3 college credit hours
A survey course in Mathematics designed to improve problem solving, critical thinking, and quantitative reasoning skills. While this course is designed for students not intending to continue on to higher-level mathematics courses, the course does examine diverse applications of contemporary mathematics and provides an understanding of the role of mathematics in society and daily life. This understanding is accomplished by studying selected topics from set theory, number theory, algebra, math of finance, and probability.

## COLLEGE ALGEBRA

MAT1130

## Grades 7-12

1 HS credit/4 college credit hours
Linear, polynomial, rational, radical, inverse, exponential, logarithmic, composite, and piecewise defined functions, their graphs, properties, symmetries, and applications, complex numbers, real roots of polynomial functions, conic sections, systems of linear equations in 2 variables, 3 variables, matrices, and linear and quadratic curves of best fit.

OHIO UNIVERSITY (The following 2 courses count as Foreign Language elective credits.) ELEMENTARY SPANISH I*

Grades: 7-12
1 HS Credit/4 college credit hours
Developing proficiency in listening, reading, speaking, and writing essential to interactive language use. First course in beginning Spanish sequence.
Learning Outcomes:

- Students will be able to identify simple key elements of cultural behavior in the country or countries in which the language is spoken.
- Students will be able to execute simple key cultural behaviors appropriate to life in the country or countries in which the language is spoken.
- Students will be able to express facts, experiences, and opinions orally, using basic, meaningful language in different tenses.
- Students will be able to express facts, experiences, and opinions in writing, using basic, meaningful language in different tenses.
- Students will be able to summarize facts, experiences, and opinions expressed orally by others in the language.
- Students will be able to summarize facts, experiences, and opinions expressed in writing by others in the language.


## ELEMENTARY SPANISH II*

## SPAN 1120

Grades: 7-12
1 HS Credit/4 college credit hours Prerequisite: SPAN 1110
Developing proficiency in listening, reading, speaking, and writing essential to interactive language use. Second course in beginning Spanish sequence. Learning Outcomes:

- Exhibit culturally appropriate behavior in common social contexts and demonstrates a general understanding and appreciation of the language-specific cultures and peoples.
- Produce basic spoken language and written texts relating experiences and personal opinions on those topics in the past, present, and future.
- Understand and interpret the meaning and structures of elementary spoken language and written texts exploring such topics as family, housing, food, technology, the environment, etc.

