# Lexington High School 



# Program Guide 2024-2025 

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## Preface to Program Guide

## Lexington Schools Nondiscrimination Statement

It is the policy of Lexington Public Schools not to discriminate on the basis of gender, disability, race, color, religion, marital status, age or national origin in its education programs, administration, policies, employment or other district programs.

## Graduation Requirements

## Total Credits Required 225

English - 40 credits
Mathematics - 30 credits
Science - 30 credits
Social Studies - 25 credits
American Government - 5 credits
Economics/Financial Literacy - 5 credits
Health/ Physical Education - 10 credits
Foundations of Leadership* - 10 credits
Electives - 70 credits**

* Foundations of Leadership is required for 9th graders. Students who transfer to LHS after 9th Grade are not required to take FOL.
** The elective course requirement of 70 credits increases to 80 credits for students who do not complete Foundations Of Leadership course.


## NEW: COHORT CLASS OF 2028 will be required to have 5 credits of Computer Science

## Academic Distinction

Recognition for academic distinction requires a student to successfully complete all requirements for graduation, attain a minimum 3.70 grade point average at the end of seven (7) semesters of coursework, and earn the following credits. Students who receive an " $F$ " in any class are ineligible for academic distinction.

- English: 40 hours (must include intensive reading and writing experiences).
- Mathematics: 40 hours (must include Algebra I and II, Geometry and an Algebra-based course)
- Science: 40 hours (must include 20 credits selected from Biology, Chemistry, Physics and Physical Sciences)
- Social Studies: 35 hours (must include 5 hours of American Government and Economics/Financial Literacy)
Foreign Language: 20 hours (in one language)


## Honors Course Placement and Content

Students must meet the of the following requirements for acceptance in an Honors Class:

1. Met all prerequisites
2. Previous year teacher recommendation
3. Minimum MAP requirements
4. Incoming Freshman may only sign up for a maximum of two honors courses

The course content of Honors courses will be broader in scope, greater in depth and more intellectually rigorous than that typically found in other classes. Honors courses will stress analytical skills and higher order thinking in addition to the mastery of basic skills, and will typically take five hours in out-of-class preparation per week. It is recommended that students maintain an 85 (B) percent average or above. Students with a grade of $84 \%$ (C) or below will not receive honors points and may be reassigned to another class.

## Grades and Weighted Grades

The following are the letter grades and numerical calculations used at Lexington High School

| Letter Grade | Percentage Grade | Computer Grade | Honors Grade |
| :---: | :---: | :---: | :---: |
| A+ | $98-100$ | 4.33 | 5.33 |
| A | $93-97$ | 4.0 | 5.0 |
| B+ | $90-92$ | 3.33 | 4.33 |
| B | $85-89$ | 3.0 | 4.0 |
| C+ | $82-84$ | 2.33 | 2.33 |
| C | $74-76$ | 2.0 | 2.0 |
| D+ | $70-73$ | 1.33 | 1.33 |
| D | Below 70 | 0 | 1.0 |
| F |  | 0 |  |

* Prior to 2015-16:

1) "Minuses" (i.e. A-, B-, C- and D-) were used in G.P.A. calculations on transcripts.
2) "Honors Points" for grades of $C+$ or lower in "Honors Classes" were included in G.P.A. calculations on transcripts.
3) Grades prior to 2015-16 include the aforementioned in G.P.A. calculations, but aren't included in 2015-16 and later.

## Class Rank

Class rank will be determined by the order of academic grade point averages for students in each class. The "percentage grades" received in courses will be averaged by points each semester to determine the cumulative grade point average of each student. The cumulative grade point averages in each class will be ranked, and the student with the highest grade point average will be ranked number one. Grade Point Average (GPA) is determined by four years of high school academic work. All courses will be included in the grade point average. Students who transfer into the school district will have their grades evaluated on the district's grading system.

## Incomplete And Failing Grades

ALL INCOMPLETE grades must be completed within two weeks of the end of each quarter unless circumstances necessitate a longer period of time. The teachers and the individual student, with approval of the principal, will arrange this extended time. If the incomplete is not made up by the specified time, the teacher will finalize the student's grades.

## University of Nebraska - Admissions Requirements

Any student planning on attending UNL, UNK*, or UNO* needs to have an educational plan meeting the following requirements:

| English | 4 years |  |
| :---: | :---: | :---: |
| Mathematics | 4 years | Algebra I, Geometry, Algebra II, (4 years for UNL, above Algebra II) |
| Social Sciences | 3 years |  |
| Natural Sciences | 3 years | physical science or earth science, biology, chemistry, physics, anatomy/physiology |
| Foreign Language | 2 years | *Students unable to take two years of foreign language may still qualify for admission but will be required to take two semesters Of foreign language at UNL. These students are still required to complete 16 units of academic courses for admission. |

Performance Requirements: In addition to meeting the above core course requirements, students applying for admission to the University should:

■ be ranked in the upper one-half of their high school class OR

- have received an ACT composite score of 20 or higher OR

Students who do not meet the above requirements for assured admission should still apply for admission. Each application will receive individual review for demonstration of potential for success - at the university-level work.

- UNK and UNO have the same requirements except they require only 3 years of Mathematics and one additional unit from any academic discipline.


## Athletes/students planning on participating in intercollegiate activities in college

$>$ NCAA -- Students planning to participate in intercollegiate activities at a Division I, II or III college must register at the NCAA clearinghouse and have their high school transcript submitted. Eligibility requirements, additional information and registration information can be found at the NCAA Eligibility Center at www.eligibilitycenter.org/
$>$ NAIA -- Students planning to participate in intercollegiate activities at any NAIA college will need to register and have their high school transcript sent to the NAIA Eligibility Center. More information about requirements and registration can be found at https://www.playnaia.org

## Educational Planning

Since sound educational planning is a critical part of future success, the counseling staff and homeroom advisors will devote a great deal of time and effort to helping the students and their parents design an appropriate educational plan and monitor progress. Each year students will have a chance to sit down with their counselor and visit about career goals and courses to help them attain knowledge and skills in those areas.

## Educational Programs -- Curricular Paths

Tech Prep is a career development path that provides a student with a planned program of study that incorporates academic and career-related courses articulated between leading to a diploma, degree, or two-year apprenticeship certificate.
College Prep is a course of study primarily designed to prepare students for four year colleges and universities.

# English 

SCOPE AND SEQUENCE

| OPTIONS | 9TH GRADE | 10TH GRADE | 11TH GRADE | 12TH GRADE |
| :--- | :--- | :--- | :--- | :--- |
| General <br> Tech Prep | English 1 S <br> English 1 | English 2 S <br> English 2 | English 3 S <br> English 3 | English 4 S <br> Career \& Tech English <br> English 4 |
| College Prep | English 1 S <br> English 1 | English 2 S <br> English 2 | English 3 S <br> English 3 | English 4 S <br> English 4 |
| College Prep (H) | English 1 H | English 2 H | English 3 H | College English I H <br> College English II H |

## English 1

## Grade 9

## 2 Semesters

This course will focus on vocabulary, reading, and writing. Students will read a whole-class novel, several short stories, nonfiction articles, and poetry from classical and contemporary authors. In addition, they will write poetry, proof-logic paragraphs, the multi-paragraph expository essay with citations according to the MLA style guide. They will also work with punctuation and grammar, editing other works and within the context of their own writing. Vocabulary practice and oral presentations round out the freshman curriculum. Some sections may be co-taught by resource teachers to provide extra support.

## English 1 - Honors

## 2 Semesters

## Teacher Recommendation

Students are required to show proof of critical thinking as they discuss texts and write essays. Like English 1, several short stories, nonfiction articles, and poetry from classical and contemporary authors are read, but more texts are covered in English 1 Honors. In addition to the poetry, proof-logic paragraphs, the multi-paragraph expository essays, students will also write a semester research paper with citations according to the MLA style guide. At the end of the semester, students will compile and analyze a portfolio of their writings. They will also work with punctuation and grammar, editing other works and within the context of their own writing. Vocabulary practice and oral presentations round out the freshman curriculum. The student's English grade must maintain an 85\%.

## English 2

## Grade 10

## 2 Semesters

This class will explore the different genres of literature, including novels, dramas, poetry and short stories, which students will read and discuss. A minimum of two novels will be selected from an approved reading list. Students will discuss the various issues and literary devices in writing and give oral and written analysis of them. Students will improve their writing skills by working on different types of paragraphs and essays, including the expository/informative and introduction to the argumentative. Students will also write a 5-8 page research paper to improve their research and citation skills. Some sections may be co-taught by resource teachers to provide extra support.

## English 2 - Honors

2 Semesters
Grade 10
This class is part of the honors curriculum and is reading and writing intensive. Various types of world literature will be explored from classical drama through contemporary novels and poetry. Students will read and analyze short stories, novels, nonfiction and poems. Basic essay structures will be expanded and variations of the essay, such as the editorial and the personal letter, will be practiced. Students will select topics for research using the National History Day theme, its materials and procedures. Students will write a 1200-word historical research paper with primary and secondary sources and annotated bibliography. Academic writing will be emphasized, and MLA style will be used for citation. Students will develop grade-level and college preparatory vocabulary and be given ample opportunities for oral presentation, debate and discussion.

## English 3

## Grade 11

2 Semesters
This class will explore the different genres of literature available through reading and discussing text from the American literature anthology and selected novels. Students will discuss the various issues, literary devices, and content vocabulary that pervade the written world and give oral and written analysis of them.
Some sections may be co-taught by resource teachers to provide extra support.

## English 3 - Honors

2 Semesters
Grade 11
This class is part of the honors curriculum for secondary students. All types of American literature will be explored from Classical through Contemporary literature. Short stories, novels, nonfiction, and poetry will be presented using the American literature anthology and several selected novels. Students will become familiar with literary elements, techniques, and structure through discussion, projects, and presentations. Basic essay structure will be expanded and refined and variations of the essay will be discussed and integrated into the student writing. Student selected topics will be researched using print text and electronic sources. Formal academic writing will be emphasized within the required writing of the class and persuasive writing will be stressed. MLA style will be used and required for citation. Vocabulary development will be included within the curriculum.

Career \& Technical English
Grade 12
2 Semesters Suggested: ACT Reading 17, Map Reading score 223
This course will emphasize nonfiction texts, but also include several fiction selections. In addition, the writing component of this course will place an emphasis on technical writing and include a career based research project. This course can be taken for dual credit through Central Community College (Applied Writing - ENGL1000).

## English 4

Grade 12
2 Semesters
English 12 focuses on world and British literature through the use of an anthology, selected texts, and the student's choice of texts. The students complete a major research project of choice. Several projects throughout the year use both formal academic and technical writing. Composition pieces for the class include an argumentative essay, compare and contrast essay, cause and effect essay, and a narrative, as well as reflections/responses to literature and prompts. Some sections may be co-taught by resource teachers to provide extra support.

College English I and II--Honors 2 Semesters Teacher Recommendation and Map Reading 235
College English I and II are part of the honors curriculum for students planning on attending a four-year college. Students work to complete a research project of choice that focuses on primary research (interviews, a questionnaire or survey), multiple resources, and Excel for graphs and charts. Other types of writing are narrative, cause-effect, compare/contrast, and argumentative with the text Voices and Values providing examples, which are also used for responses/reflections. Students create multimedia presentations while learning advanced elements of PowerPoint and other multimedia techniques. MLA style on all papers, individual vocabulary growth, continued convention development, and advanced revision work round out both semesters of the class. The students continue to develop their composition skills by reading, writing, and analyzing world and British literature through the use of an anthology, selected texts, and the student's choice of texts. In addition to the above work, students create a portfolio showcasing his/her work from each semester. Dual Credit with Central Community College (ENGL 1010 (3 credit hours) and (ENGL 1020 ( 3 credit hours) will be issued to students that register for credit.

SCOPE AND SEQUENCE

| OPTIONS | $\mathbf{9}^{\text {TH }}$ GRADE | $\mathbf{1 0}^{\text {TH }}$ GRADE | $11^{\text {TH }}$ GRADE | $\mathbf{1 2}^{\text {TH }}$ GRADE |
| :--- | :--- | :--- | :--- | :--- |
| General | Pre Algebra | Algebra IA | Algebra IB | Geometry or Geometry S <br> Business Math |
| Tech Prep | Pre Algebra | Algebra I | Geometry or Geometry S <br> ACT Prep Math | Algebra II <br> Technical Math |
| C. Prep | Algebra I | Geometry or <br> Geometry S | Algebra II | Trigonometry <br> Precalculus <br> College Algebra H |
|  | Geometry | Algebra II | Precalculus <br> Trigonometry | Calculus I H <br> College Algebra H |
| C. Prep (H) | Geometry H | Algebra II H | Precalculus H <br> Trigonometry <br> College Algebra H | Calculus I H <br> Precalculus H <br> College Algebra H |

## Pre-Algebra

Grades 9-12
2 Semesters
Math MAP test scores 226-230
Students will master algebraic language, integers, one-step equations, factors and fractions, inequalities, graphing, proportions and percents, statistics, probability, area and volume, right triangles and operations with polynomials. Some sections may be co-taught by resource teachers to provide extra support.

## Algebra IA

Grades 9-12

## 2 Semesters

Math MAP test scores 231-235
A course for students to gain the working knowledge of the fundamental operations and properties of numbers, equations and inequalities, signed numbers, problem solving, graphing of linear equations, functional equations, ratio and proportion. This class is the $1^{\text {st }}$ Semester of Algebra I. Some sections may be co-taught by resource teachers to provide extra support.

## Algebra IB

2 Semesters

## Grades 9-12

## Prerequisite: Algebra IA

A course for students to gain the working knowledge of the fundamental operations and properties of numbers, equations and inequalities, signed numbers, problem solving, graphing of linear equations, special products and factoring, functional equations, ratio and proportion, roots, radicals, solving quadratic equations and probability this class is the 2nd Semester of Algebra I. Some sections may be co-taught by resource teachers to provide extra support.

## Algebra 1

2 Semesters
Grades 9-12
Math MAP test score 235 or above
A course for students to gain the working knowledge of the fundamental operations and properties of numbers, equations and inequalities, signed numbers, problem solving, graphing of linear equations, special products and factoring, functional equations, ratio and proportion, roots, radicals, and solving quadratic equations.

# Geometry <br> Grades 9-12 <br> 2 Semesters Prerequisite: Math MAP scores 240-245 \& passed Algebra I or (Algebra IA and Algebra IB) 

This course will emphasize geometric concepts from a construction and practical application point of view with a de-emphasis on geometric proofs. Students will study basic geometry topics including polygons, circles, perimeter, area, volume, ratios, proportions, congruence and similarity of triangles.
Special Equipment: Scientific calculator, protractor, straightedge, compass, colored pencils
Some sections may be co-taught by resource teachers to provide extra support. (Semester tests will be the same for all Geometry sections)

Geometry - Honors
Grades 9-12
2 Semesters
Prerequisite: Algebra I \& Math MAP test scores 245 or higher
This geometry is geared for students wishing to pursue a four year degree in mathematics, engineering, architecture, or other sciences with an approach that emphasizes the mathematical structure of geometry, beginning with and coordinating throughout the year on symbolic logic and proof. Detailed discussion of logic, language, and the deductive system helps students to realize that mathematics has a structure that transcends a collection of formulas and diagrams. Major emphasis will be placed on inductive and deductive reasoning, along with logical reasoning skills. The students will also study coordinate geometry and coordinate proofs, logic problems, transformations, and extensive construction problems. Students will be required to do lab activities. Special Equipment: Scientific calculator, protractor, straightedge, compass, colored pencils

Technical Math

## Grade 12

2 Semesters
MAP scores fall start 225, spring start 234
This course provides the math skills required in career/technical fields. The course includes a review of arithmetic operations, exponents, algebraic operations, and right triangle trigonometry with emphasis placed applications. Students will have the opportunity to take this class for dual credit through Central Community College (Technical Math - MATH1020).

## Algebra II

2 Semesters

Grades 10-12
Prerequisite: Algebra I \& Geometry

This course begins with a review of basic material of earlier work in algebra. Topics pursued: fractions and fractional equations, functional relations, graphs and linear equations, systems of linear equations and inequalities, ratios, proportions, and variations, exponents, imaginaries and radicals, quadratic functions along with equations and systems involving quadratic equations, polynomial and logarithmic functions, matrices, and sequences.

## Algebra II - Honors

Grades 10-12
2 Semesters
Prerequisite: Geometry Honors or Geometry with Teacher Recommendation
This course is intended to take geometry students who have shown a sincere interest in a math related field and accelerate them in Algebra II covering the same topics covered in Algebra II, along with trigonometry, conics, progressions, and the binomial theorem. This course is essential for students wanting to take calculus. Students will be required to do lab activities.

College Algebra - Honors
Grades 11-12
2 Semesters
Prerequisite: Meet minimum test scores set required by CCC
College level algebra course, which includes a study of linear equations and inequalities, relations and functions, graphing of linear and quadratic functions, polynomial and rational functions, logarithmic and exponential functions, system of equations matrices, sequences and series, and other selected topics all of which are necessary for the study of calculus. Dual Credit with Lexington High School and MATH 1150 College Algebra (3 credit hours) will be issued at successful completion by Central Community College.

## 2 Semesters

Prerequisite: Algebra I, Algebra II, Geometry
Pre-Calculus combines the trigonometric, geometric, and algebraic techniques needed to prepare students for the study of calculus, and strengthens students' conceptual understanding of problems and mathematical reasoning in solving problems. Facility with these topics is especially important for students intending to study calculus, physics, and other sciences, and/or engineering in college. This course is designed to cover topics in algebra ranging from polynomial, rational and exponential functions to conic sections. Trigonometry concepts such as Law of Sines and Cosines will be introduced. For this Precalculus course, instructional time will focus on four critical areas: (1) extend work with complex numbers; (2) expand understanding of logarithms and exponential functions; (3) use characteristics of polynomial and rational functions to sketch graphs of those functions; and (4) perform operations with vectors. This course is designed to provide a comprehensive study of functions, which are the basis of calculus and other higher mathematics courses. The students will study the properties and graphs of trigonometric, polynomial, rational, inverse, exponential and logarithmic functions in the first semester. During the second semester, the students will explore inequalities, polar coordinates, complex numbers, conic sections, matrices, vectors, sequences, and series.

## Pre-Calculus - Honors

Grades 11-12
2 Semesters
Prerequisite: Algebra I, Algebra II, Geometry
Calculus is the mathematics of motion and change. A strong background in algebra, geometry and basic trigonometry is necessary. A review of basic trigonometry and the language of functions (including properties, algebra, and graphs) will be addressed in the first quarter. Also, a review of the graphing calculator capabilities will be addressed. This course is essential for students wanting to take calculus. Students will be required to do lab activities. Dual Credit with Lexington High School and MATH 1410 Pre-Calculus (5 credit hours) will be issued at successful completion by Central Community College.

Trigonometry
Grades 11-12
2 Semesters
Prerequisite: Algebra 1, Geometry, Algebra II
A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solutions.

Calculus I-Honors
Grade 12
2 Semesters
Prerequisite: Precalculus
This course is a continuation of Pre-Calculusl. A review of limits, functions, and derivatives will be addressed. Topics covered will include integrals (including Riemann sums, interpretations and properties of definite integrals), applications of integrals, and polynomial approximations and series. Students will be expected to do lab experiments and do research projects using the internet. Dual Credit through Central Community College (MATH 1600 - Analytic/Geometry \& Calculus I) (5 credit hours) will be issued at successful completion of both semesters.

SCOPE AND SEQUENCE

| OPTIONS | 9TH GRADE | 10TH GRADE | 11TH GRADE | 12TH GRADE |
| :--- | :--- | :--- | :--- | :--- |
| General | Applied Science S | Physical Science S | Biology S | Ecology/Introduction to <br> Chemistry |
| Tech Prep | Physical Science | Biology | Ecology/Introduction to <br> Chemistry <br> Forensic Law (Sem) | Chemistry <br> Forensic Law (Sem) <br> Horticulture (Sem) <br> Animal Science (Sem) |
| C. Prep | Physical Science <br> Physical Science H | Biology <br> Biology H | Chemistry <br> Chemistry H | Physics H <br> Advanced Biology H <br> Anatomy/Physiology H <br> Chemistry II H <br> Forensic Law (Sem) |

## Applied Science

## Grade 9 Only/ELL students

## 2 Semesters

Applied Science (S) - MAP math score of 212 or less, for freshman only
Applied Science - MAP math score between 213-222
The purpose of this class is to give a student a basic understanding of the increasingly changing world of science. Applied science is a hands-on, inquiry based class. Students will be engaged in numerous activities with integrated writing. This science course will focus on the scientific method, and basic biology concepts. First semester will focus on learning about the scientific method by doing science. Second semester will continue with basic biology concepts. Some sections may be co-taught by resource teachers to provide extra support.

## Physical Science (integrated with Earth Science) <br> 2 Semesters

Grades 9-12

Prerequisite: MAP math score of 222 or passed Applied Science. Only students who have taken Applied Science are eligible for Physical Science (S). No Freshmen in Physical Science (S).
Physical Science is a practical study of the relationship between matter and energy. It is divided into 6 units where the students study terms and concepts in the main subjects of chemistry and physics. The main units of study include: (1) measurement and motion, (2) classification of matter, (3) patterns in matter, (4) changes in matter, (5) light and sound, and (6) energy resources. The first semester is devoted to areas of chemistry and the second semester is focused on topics covered by physics with earth science topics integrated throughout both semesters. Some sections may be co-taught by resource teachers to provide extra support.


#### Abstract

Physical Science - Honors (integrated with Earth Science) Grade 9 2 Semesters Prerequisite: Completed Algebra I/Math MAP scores of $\mathbf{2 4 5}$ or above The first semester focuses on concepts of basic chemistry, including structure of matter, atomic structure, chemical reactions, and the organization of the Periodic Table of the Elements with Earth science topics integrated throughout the semester. The second semester with Earth science topics integrated throughout focuses on mechanics, work, power, forces involved with motion, and various forms of energy. Students will do laboratory, Internet, and library research on problems each quarter, formulate and test hypotheses and write conclusions.


Biology is devoted to the study of, and interactions between living organisms and the environment around us. General topics include cell structure and function, genetics and inheritance, ecology and human population growth, zoology (animals and their classification), and botany (plants) with integrated earth science topics. Some sections may be co-taught by resource teachers to provide extra support.

## Biology - Honors (integrated with Earth Science)

Grade 10 2 Semesters

Prerequisite: Passed Physical Science/Teacher recommendation Honors Biology seeks to provide an accelerated and challenging class for those students who qualify. The goal is to achieve knowledge of facts, principles, and processes of biology with integrated earth science topics. Students gain an understanding of scientific methods through research projects, laboratory experiments, and outside reading and projects. The interrelationships of science, society and technology will be noted throughout the curriculum. A research project will be due at the conclusion of the year. Students will be able to present research projects through computer aided programs.

## Ecology

Grades 11-12
1 Semester - Fall only
Prerequisite: Passed Biology and Physical Science
Ecology is a class that studies the interaction of organisms with each other and their environment. This class is for students that have passed biology and do not meet the math requirement for chemistry. This class will cover topics such as water quality, population sampling and analysis, limnology, and data analysis. There will also be an intensive literary component in which students will analyze how the use of resources determines the success or failure of a civilization. Class will include several days of field work. There may be plant tissue collections that students will have to complete on their own time. As this is an outdoor based class students should not be reluctant to examine slimy logs, smell stinky water, and investigate otherwise unpleasant things in nature.

## Introduction to Chemistry <br> 1 Semester - Spring only <br> Grades 11-12 <br> Prerequisite: Passed Physical Science \& Biology

This class is for those Juniors or Seniors that have not met the math requirements for regular chemistry. This class will provide an introduction to chemistry topics in an effort to build a base of knowledge (schema) without requiring a rigorous math background for students in an effort to prepare them for regular chemistry. Topics covered will include Matter and Measurement, Properties of Matter, Transformation of Matter, and Topics in Chemistry (intermolecular forces, solutions, and acids/bases.)

Forensic Law
Grades 11 \& 12
1 Semester

## Prerequisite: Biology, interested in Criminal Law

This class is the application of scientific techniques in collecting and analyzing physical evidence in criminal cases. This forensic law-science class, in its broadest definition, is the application of science to law. This class is a problem based learning experience. Students will learn how science is used to solve and provide accurate and objective information that reflects the events that have occurred at a crime scene. Some topics that will be covered: the history of forensic, the crime scene, physical evidence, forensic toxicology, use of microscopes, forensic serology, trace evidence, computer forensics and careers in forensic science.The career of a criminalist uses the science and profession dealing with the recognition, collection, identification, individualization, and interpretation of physical evidence, and the application of the natural sciences to law-science matters.

## Chemistry <br> Grades 11-12

2 Semesters

## Prerequisite: Passed or Currently Enrolled in Algebra 2

Chemistry is the science that deals with the materials of the universe and the changes that these materials undergo. Students should have a strong understanding of algebra. Chemistry is often considered to be the most difficult class in high school because of the need to use upper level math skills to solve complex problems about abstract topics. Students will apply skills and knowledge to solve problems and answer questions using observation, experimentation, and inquiry. Students will carry out experiments to further their understanding of chemistry. Topics covered include: Matter, Atomic Structure, Nomenclature, the Periodic Table, Measurements and Calculations, the Mole, Chemical Reactions, Stoichiometry, Energy, Modern Atomic Theory, Bonding, Gases, Liquids and Solids, Solutions, Acids and Bases, Equilibrium, Oxidation-Reduction Reactions, Radioactivity and Nuclear Energy, and Organic Chemistry.

Designed to meet the objective of a first semester college chemistry course. Students gain a basic knowledge of inorganic chemistry. Through the use of skills and knowledge learned students answer questions and solve problems using observation, experimentation, and inquiry. Students design and carry out original experimentation. Student grades are based on classwork, lab work, tests, and a semester research paper. Additionally students will read up to one book per quarter. Those books include The Periodic Kingdom by P.W. Atkins, Silent Spring by Rachel Carson, The Alchemy of Air by Thomas Hager, and Napoleon's Buttons by Penny Le Couteur and Jay Burreson. In the spring students will be required to complete an iMovie about a famous chemist. Topics covered include: Matter, Atomic Structure, Nomenclature, the Periodic Table, Measurements and Calculations, the Mole, Chemical Reactions, Stoichiometry, Energy, Modern Atomic Theory, Bonding, Gases, Liquids and Solids, Solutions, Acids and Bases, Equilibrium, Oxidation-Reduction Reactions, Radioactivity and Nuclear Energy, and Organic Chemistry. Dual credit will be offered through Lexington High School and Central Community College (CHEM 1050). (minimum MAP math score of 240 or ACT math of 19 , no waiver)

Chemistry II - Honors
Grade 12
2 Semesters
Prerequisite: Passed Chemistry and Algebra II
Chemistry II will strengthen and broaden student's chemistry knowledge as well as build a solid base for undergraduate chemistry/biology/physics classes. Students will develop critical thinking and scientific writing skills. Topics to be covered include: review of nomenclature, equations, conversions, atomic theory, kinetic molecular theory, stoichiometry, electron configuration, bonding, compounds, formulas, phases, gasses, and solutions.....and introducing Acids and Bases, Acid-Base Titrations and pH , Reaction Energy, and Reaction Kinetics, Chemical Equilibrium, Oxidation-Reduction Reactions, Electrochemistry, Nuclear Chemistry, Organic Chemistry, Biological Chemistry, and Current Topics in Chemistry. Dual credit with Lexington High School and Central Community College will be offered for (CHEM 1090). (minimum MAP Math score 240 or ACT Math 19, no waiver).

## Advanced Biology - Honors

Grade 12
2 Semesters Prerequisite: Passed Biology and taken either Chemistry or Intro to Chemistry This course covers fundamental processes of cells and organisms, cell structure, genetics, evolution, classification, diversity, and interaction of organisms at the molecular, cellular, organismic, ecosystems and biosphere level. It is designed as both a course for non-majors and as a foundation course for those planning additional work in biology. This includes a lab that accompanies lecture material. Students can receive dual credit with Lexington High School and Central Community College (BIOS 1010) for 4 credits.

## Anatomy/Physiology <br> Grades 11 and 12 <br> 2 Semesters Prerequisite: Passed Biology, and Intro to Chemistry OR taken or currently enrolled in Chemistry

Designed for students seriously considering careers in medical, health, or science related fields; anatomy will give them a more detailed study of the structure of the human body than the ordinary biology course. A number of topics will be addressed in this course, including: history of anatomy, anatomical terminology, histology, the skeletal system, the integumentary system, the muscular system, and internal anatomy. Special projects: in the laboratory the students will perform a dissection of a cat to help gain an understanding of the principles of anatomy and to serve as a background for further laboratory techniques required in college. Topics covered in physiology include: basic principles of physiology, the nervous, digestive, circulatory, endocrine, excretory, respiratory, and reproductive systems. Special projects: the last part of the class will be independent study. Evaluation procedure: grade is based on total points earned from exams over lectures, discussions, and reading assignments, lab write ups, study guides, homework, and independent study.

2 Semesters Prerequisite: Passed Biology, and Intro to Chemistry OR taken or currently enrolled
in Chemistry Designed for students seriously considering careers in medical, health, or science related fields; anatomy will give them a more detailed study of the structure of the human body than the ordinary biology course. A number of topics will be addressed in this course, including: history of anatomy, anatomical terminology, histology, the skeletal system, the integumentary system, the muscular system, and internal anatomy. Special projects: in the laboratory the students will perform a dissection of a cat to help gain an understanding of the principles of anatomy and to serve as a background for further laboratory techniques required in college. Topics covered in physiology include: basic principles of physiology, the nervous, digestive, circulatory, endocrine, excretory, respiratory, and reproductive systems. Special projects: the last part of the class will be independent study. Evaluation procedure: grade is based on total points earned from exams over lectures, discussions, and reading assignments, lab write ups, study guides, homework, and independent study. Students will be required to study case histories and to explore deeper into recent medical research. Students will be required to answer questions regarding real-life scenarios on tests and complete one major research assignment concerning the medical field per quarter.

## Physics - Honors

## Grade 12

2 Semesters Prerequisite: Completion of Precalculus, Chemistry, minimum Math Map score 245 Physics is the study of the relationship between matter and energy. Topics included in that study are: laws of motion (Newton's laws) and the forces that cause them, energy (potential and kinetic) and momentum, waves and their relationship to sound and light, magnetism and electricity, and thermodynamics. Students who anticipate a vocation in engineering, architecture or science will find the study of physics a necessary part of their education. Classroom activities will include lecture, laboratory, problem solving homework, research projects, and outside reading materials. Research projects will include students designing and conducting their own experiments on selected topics. Building of equipment for the project will be part of the experimental phase.

## Social Sciences

## SCOPE AND SEQUENCE

| OPTIONS | $9^{\text {TH }}$ GRADE | $10^{\text {TH }}$ GRADE | $11^{\text {th }}$ GRADE | 12 ${ }^{\text {TH }}$ GRADE |
| :--- | :--- | :--- | :--- | :--- |
| General \& Tech <br> Prep | 20th Century American <br> History | Geography/Economics <br> Sociology of the Family | Western Civilization <br> Psychology <br> Sociology <br> Criminal Justice <br> Sociology of the Family | American Govt. <br> Psychology <br> Sociology <br> Criminal Justice <br> Sociology of the Family |
| College. Prep | 20th Century American <br> History | Geography/Economics <br> Sociology of the Family | Western Civilization <br> Psychology <br> Sociology <br> Criminal Justice <br> Sociology of the Family | American Government <br> Psychology <br> Sociology <br> Criminal Justice |
| College. Prep (H) | 20th Century American |  |  |  |
| History H | Geography/Economics H | Western Civilization H <br> Psychology <br> Sociology <br> Criminal Justice | American Government H <br> Psychology <br> Sociology <br> Criminal Justice |  |

## 20th Century American History

Grade 9

## 2 Semesters

This course explores the period of time from 1900 to present in American History. The Following topics are covered: settling of the West, Gilded Age, Progressive Era, WW I, Great Depression, WW II, Cold War, Civil Rights Movement, and Watergate. Some sections may be co-taught to provide extra support.

## 20th Century American History - Honors

 2 SemestersGrade 9
This course explores the period of time from 1900 to present in American History. The Following topics are covered: settling of the West, Gilded Age, Progressive Era, WW I, Great Depression, WW II, Cold War, Civil Rights Movement, and Watergate.

## Geography <br> Fall Semester

Grade 10
This course provides an introduction to study of the world through the geographic perspective. The course will study the impact and major themes of geography, the acquiring of geospatial literacy, the understanding of the environmental, cultural, and economic differences of various regions around the earth, the major types of governments, and political structures of society, and develop a further knowledge of the impact that globalization has on our world today. Some sections may be co-taught by resource teachers to provide extra support.

## Geography -Honors

Grade 10
Fall Semester
This course provides an introduction to study of the world through the geographic perspective. The course will study the impact and major themes of geography, the acquiring of geospatial literacy, the understanding of the environmental, cultural, and economic differences of various regions around the earth, the major types of governments, and political structures of society, and develop a further knowledge of the impact that globalization has on our world today.

## Intro to Economics and Financial Literacy Spring Semester

REQUIRED
Grade 10

This course will be an introduction to Microeconomics, Macroeconomics, and Personal Finance. Special attention will be placed on economic theories and systems, the interworking of the capitalistic market, the impact of globalization, and how to be responsible after high school in regards to their financial literacy. Particular emphasis will be placed on the immediate application of the course's material for students to present day experiences. Some sections may be co-taught by resource teachers to provide extra support.

## Intro to Economics and Financial Literacy - Honors <br> REQUIRED <br> Grade 10 Spring Semester Teacher Recommendation and Map Reading 234

This course will be an introduction to Microeconomics, Macroeconomics, and Personal Finance. Special attention will be placed on economic theories and systems, the interworking of the capitalistic market, the impact of globalization, and how to be responsible after high school in regards to their financial literacy. Particular emphasis will be placed on the immediate application of the course's material for students to present day experiences.

## Western Civilization

Grades 11-12

## 2 Semesters

The main objective of this class is to improve upon students' ability to critically analyze the past and determine how it relates to the present/future. This class spans from the development of the monotheistic religions through the Cold War. Course work focuses on writing, critical thinking and analysis through the use of technology.
Some sections may be co-taught by resource teachers to provide extra support.

## Western Civilization - Honors

Grades 11-12

## 2 Semesters

Teacher Recommendation and Map Reading 234
The main objective of this class is to improve upon students' ability to critically analyze the past and determine how it relates to the present/future. This class spans from the development of the monotheistic religions through the Cold War. Course work focuses on writing, critical thinking and analysis through the use of technology. Students will have the opportunity to take this class for Dual Credit through Central Community College (Western Civilization HIST1010).

## Sociology of the Family <br> Grades 10-12

## 1 Semester

This course is a study of human relationships - personal, social, marital, and family. Possible units of study include human communication, self-awareness and understanding; dating relationships and social problems encountered; marriage readiness and responsibilities, and family crisis. Films and resource people add to the classroom experiences by giving insight into such topics as: body language, contraception, unplanned pregnancies, reproduction and sexually transmitted diseases, alcoholism, death, etc. Careers related to the family and human development area will be integrated throughout. Entrepreneurship will be included as a career option for the family.

## Criminal Justice

Grades 11-12

## 1 Semester

Students will gain an understanding of business and personal law. Legal procedures and the range of legal remedies will be explored. The use of precise legal language and how to analyze and apply principles to legal situations will be learned. A mock trial involving all students in the class will be given the last week of class.

## Psychology

Grades 11-12
1 Semester
The main goal of this course is for the students to receive a better understanding of their own behavior and the behavior of others around them. Students will obtain this goal through a study of the development of human behavior and factors that have the most significant effect upon this development. Students will look at typical and abnormal behavior patterns to give an insight of what is "normal". Evaluation procedure: questions over reading assignments, tests, and participation in groups.

## Sociology

Grades 11-12

## 1 Semester

Sociology deals with groups of humans. This class focuses on our social and cultural environment, how culture has developed and changed, and the effect culture has on man's personality. Students will look at the main institutions of culture: education, government, family, economy, and religion and see how they have developed and their effect on man. Through this process students will be able to better understand themselves and the people around them. Evaluation procedure: will be through a series of quizzes and tests over the material covered.

## 1 Semester

This is a required senior social studies course (Citizenship may be substituted for those students who qualify), which has the objective of developing an understanding of the American political system. The student will examine types of governments, but will spend most of the course looking at the national level of our government as well as world affairs, and current political system. Evaluation procedure: Grades are based on tests and knowledgeable participation in class activities. Some sections may be co-taught by resource teachers to provide extra support.

| American Government Honors | REQUIRED | Grade 12 |
| :--- | ---: | :--- |
| 1 Semester | Teacher Recommendation and Map Reading 235 |  |

This course gives highly motivated students an opportunity for an advanced learning experience. Students will study important facts, concepts and theories pertaining to U.S. government and politics, examine patterns of political behavior, and analyze and interpret basic data relevant to government and politics.

## Agricultural

AGRICULTURE SCOPE AND SEQUENCE

| 9th GRADE | 10th GRADE | 11th GRADE | 12th GRADE |
| :---: | :--- | :--- | :--- |
|  <br> Natural Resources I (1 <br> sem) | Horticulture (S. Sem) <br> Animal Science (F.Sem) | Ag Leadership/Agribusiness <br> Large Animal Mgmt (F.Sem)/ <br> Animal Science (F.Sem) <br> Landscape Design (F.Sem) <br> Horticulture (S. Sem) | Ag Leadership/Agribusiness <br> Large Animal Mgmt (F.Sem) / <br> Animal Science (F.Sem) <br> Landscape Design (F.Sem) <br> Horticulture (S. Sem) |
|  |  <br> Natural Resources I \& II | Horticulture (S. Sem) <br> Animal Science (F.Sem) <br> Ag Leadership/Agribusiness | Ag Leadership/Agribusiness <br> Large Animal Mgmt (F.Sem) / <br> Animal Science (F.Sem) <br> Landscaping Design (F.Sem) / <br> Horticulture (S. Sem) |
| Power, Structure \& Tech <br> Found (1 sem) | Power, Structure \& Tech Found <br> (1 sem) |  |  |

## Introduction to Ag, Food \& Natural Resources I (11000)

Grades 9-10

## 1 Semester

The introductory course for the Agriculture, Food and Natural Resources Career Cluster provides a knowledge base and technical skills in all aspects of the industry. Learners will be exposed to a broad range of agriculture, food and natural resources careers, cluster foundation knowledge and skills, introduction to leadership development, the FFA organization and career exploration. Topics covered include horticulture, natural resource issues and mechanics. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

## Landscape Design (012001) Grades 11-12 <br> Fall Semester Prerequisite: Horticulture

This course examines the knowledge, explanations and illustration of the fundamentals of residential landscape design. Process of designing a residential landscape, from initial contact with the client and discussion of a rough concept, to completing a finished master plan and selecting materials for implementing the design. Numerous illustrations and helpful case study examples provide a clear look at the principles and techniques. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Horticulture (Plant Science) (011007)
Grade 10-12

## Spring Semester Prerequisite: Intro to Ag, Food \& Natural Resources I \& II

This course examines the scientific concepts related to plant systems. Students will consider environmental factors on plant growth. In addition students will examine plant classification, anatomy, physiology, and methods of propagation. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. This class will count as Science credit

Animal Science (Biology) (11004)
Fall Semester

Grades 10-12
Prerequisite: Intro to Ag, Food \& Natural Resources I \& II

A course focusing on the basic scientific principles and processes that are involved in animal physiology, breeding, nutrition, and care in preparation for an animal systems career. Topics include animal diseases, introduction to animal science, animal nutrition, animal science issues, career opportunities and animal evaluation Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities. This class will count as Science credit

Spring Semester Prerequisite: Intro to Ag, Food \& Natural Resources I \& II, Animal Science This course includes advanced scientific principles and communication skills that build on the knowledge and skills learned in Animal Biology. Topics include animal waste management, animal science economics, decision-making, global concerns in the industry, genetics, and breeding. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

Agribusiness/Ag Leadership and Career Development (011009) (017000) Grades 11-12 2 Semesters

Prerequisite: one year of previous Ag study
This course covers skills necessary for entry into employment or furthering education in an agricultural business. The course includes the study of business planning, creating and analyzing financial information, developing business plans, and using sales and marketing principles. Classroom and laboratory activities are supplemented through supervised agricultural experiences and leadership programs and activities.

# Industrial Technology 

INDUSTRIAL TECHNOLOGY SCOPE AND SEQUENCE

| Power, Structure \& Tech <br> Found \& Systems (1 sem) | Woods Tech I \& 2 and Concepts <br> of Electronics | Advanced Woods 1 \& 2 | *Construction Trades 1 \& 2 |
| :--- | :--- | :--- | :--- |
|  | Power, Structure \& Tech Found <br> \& Systems (1 sem) | Woods Tech I \& 2 | *Construction Trades 1 \& 2 <br> Advanced Woods 1 \& 2 |
|  | Drafting and Design 1 \& 2 | Drafting and Design 1 \& 2 <br> 3D Drafting | Drafting and Design 1 \& 2 <br> 3D Drafting |
|  | *Welding I | *Welding II | *Welding III |
|  | Concepts of Electronics (S) | *Automotive Tech. / <br> Transportation 1 \& 2 (year) | *Automotive Tech. / <br> Transportation 3 (year) |
|  |  | Concepts of Electronics (S) <br> \& Mechatronics <br> Instrumentation (S) | Mechatronics- Programmable <br> Controls (S) \& App of Industrial <br> Sensors (S) |

*Blocked Classes (2 periods)
Power Structure \& Technical Foundations (016000)
Grades 9-10

## Fall or Spring Semesters

Students will have hands-on opportunities to explore futuristic trends in industry. During the year, the students will learn about communication, construction, manufacturing, and transportation systems of Industrial Technology. The students will receive individual and group instruction on careers, robots, hydraulics, pneumatics, electronics, small engines, lasers, welding, and woodworking.

Robotics
(State code 103194)
Grades 9-12

## 2 semesters

This course is designed to explore the current and future use, design, construction, operation, and use of robots and automation technology. Students will apply mathematics formulas and calculations to design and construct a robot.

## Concepts of Electronics (100401)

Grade 10-12
Fall Semester
In this course you will learn Electrical Principles and how to use a multimeter while building and testing DC electrical circuits found in industry. This course is a combination of lecture and hands-on learning using industrial panels. Students interested in technical careers including Mechatronics, Automotive, Electrician, and Computers would benefit from this course. (This will be taught Dual credit with Central Community College INDT 1100 Concepts of Electronics, 3 credit hours.)

## Mechatronics Instrumentation (101900)

 Spring SemesterGrades 10-12
This course is an introduction to industrial instrumentation and an overview of measurement devices, control devices, and control loops. Students will learn the trade, terminology, and basic principles of instrumentation along with safety considerations and working conditions in Industrial Maintenance. This class is lecture and hands-on practice using knowledge and problem-solving with industry instrument panels. (This will be taught Dual credit with Central Community College INDT 1800 Introduction to Instrumentation, 3 credit hours.)

- Course Information Description: Concepts of programmable controls; hardware identification and application; circuit design and utilization of diagrams; system testing and construction.
- Course History - Purpose/Goals Explore the programmable controller environment. Build successful controller programs.
- Target Population - Students of Industrial Technology or anyone wishing an entry level understanding of controller operation and basic programming fundamentals using Allen Bradley controllers and programming software.
- This will be taught Dual credit with Central Community College INDT 1200 Introduction to Programmable Controls, 3 credit hours.

Applications of Industrial Sensors (101900)
Grade 11-12
Spring Semester Prerequisite: Intro to Programmable Controls, pass Concepts of Electronics)

- Course Information Description: An advanced course designed to inform students of the theory and applications of many sensing devices commonly used in industrial automated or instrumentation environments. Students will learn the function as all as the application of common types of discrete operating proximity sensors including optical, inductive, capacitive and ultrasonic sensing devices. Students will also learn the function and application of their analog counterparts used for precise distance and displacement measurements. Applications for force and air pressure sensing devices are covered as well.
- Purpose/Goals - Identify physical principles and limitations of industrial sensors. Select sensors for use in various industrial applications. Install various industrial sensors into a system.
- Target Population - Anyone seeking knowledge of sensing and switching devices used in industrial automated systems.
- This will be taught Dual credit with Central Community College INDT 2410 Application of Industrial Sensors, 3 credit hours.

Woods Tech I \& II ( 100100,101920$)$
Grades 10-12
2 Semesters
Students will gain knowledge on basic hand and power tool operation. Proper handling and application of each process will be stressed. Students will design, plan, and build a mass production project. The students are also responsible for selling the developed product with the profit from the experience going to pay for the cost of their initial woodworking project. Students will use both hand and power equipment to construct a required project. The project has been designed to teach proper material, tool and finishing techniques. Course work will be studied to help the student develop an understanding of manufactured wood products, and the fundamentals of the woodworking industry. In Woods II students will utilize woodworking technology to plan, build, and finish wood products using machine woodworking tools, materials, modern finishing techniques, and skills previously developed in this course. Creativity, and quality are emphasized as students further develop their interest, talents and abilities.

Advanced Woods 1 \& $2(101921,101922)$
Grades 11-12
2 Semesters
Prerequisite: Woods Tech I
Students will utilize woodworking technology to plan, build, and finish wood products using machine woodworking tools, materials, modern finishing techniques, and skills previously developed in this course. Creativity, and quality are emphasized as students further develop their interest, talents and abilities.

## Drafting and Design (Engineering Design and Systems thinking, 103191) Fall Semester <br> Computer Aided Drafting

Grades 10-12
This course is designed as an introduction to the drafting industry. During the first 9 weeks the student will gain experience in the use of drafting equipment and materials to complete a variety of drawings, including free hand sketching, geometric construction, shape and size description, plus elementary pictorial drawings. During the second 9 weeks the students will be introduced to computer aided drafting. (CAD). This will aid the student in other drafting courses and in all practical Industrial Technology fields.

## Drafting and Design II

 Spring Semester Thing wit drafting with concentration on the areas of advanced pictorial drawings, sectional drawings, blueprint reading, and assembly drawings. All work will be completed using the Autocad software applications. Advanced techniques and work like settings will be discussed for a better understanding of job and career opportunities.
## 3D Drafting (Engineering Design and Development, 100163)

Grade 11-12

## 2 Semesters <br> Prerequisite: Drafting \& Design and Teacher Recommendation

3D Drafting is an engineering research course in which students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

Construction Trades 1 \& 2 (100110)
Grades 11-12
2 Semesters - BLOCKED (2 periods a day)

## Prerequisite: Woods Tech I and II

This course is designed to help the student learn the fundamentals of the construction industry. The class will be exposed to all aspects of the construction process with a combination of classroom activities and field trip experiences. The students will learn safe power and hand tool work habits, basic concrete work and masonry, framing practices including stud, truss and roof work, plumbing, electrical and HVAC. Time will also be spent on instruction in how to manage the responsibilities of small home repair problems. Individual instruction into other areas of interest will be included.

Welding I (101930)
Grades 10-12
2 Semesters - BLOCKED (2 periods a day)
The Welding Technology program provides students with training in current welding practices and procedures. Instruction covers operations in SMAW (stick), GMAW (mig), GTAW (tig), OAW (oxyacetylene), and FCAW (flux core) with all welds being done in the flat position.

Welding II (101940)
2 Semesters - BLOCKED (2 periods a day)
Grades 10-12
This is an advanced technology course with most of the welding being done out of position on such metals as steel, aluminum, stainless steel, and cast iron. Some of the welding processes incorporated will include SMAW, GMAW, GTAW, and oxyfuel welding. Students will be able to perform entry level skills in the welding field after completing this course.

Welding Manufacturing III (101941)
Grades 11-12
1 Semester - BLOCKED (2 periods a day)
Prerequisite: Welding I \& II
This is an advanced technology course with most of the welding and skills to consider beginning career steps in the welding manufacturing area. Some of the welding processes incorporated will include SMAW, GMAW, GTAW, and OAW. Students will be able to perform entry level skills in the welding field after completing this course.

Automotive Technology 1 \& 2 / Trans.
Grades 11-12
Fall \& Spring Semesters-BLOCKED (2 periods a day)
The automotive technology program provides opportunities to obtain the fundamental knowledge, skills, and training needed for employment or career advancement as an automotive technician. Some areas to be covered will include basic shop practices, fasteners and job management, and basic engine performance and oscilloscopes.

A study of the fundamentals of electricity and the application of these fundamentals to various circuits, to include batteries, starting and charging systems and a study of basic electronics. An introduction to vehicle power trains, including a study of parts and their function, adjustment and repair procedures for clutches, manual transmissions, and drive shafts. Second semester will be a study of the types of brake systems, suspension and steering systems, alignment angles, and how they are used together to help make the vehicle safer and last a normal life. The course also teaches starting systems and proper procedure in balancing tires.

Follow the link below to watch a preview of Automotive / Transportation 1, 2 and 3.
https://drive.google.com/open?id=0B3s89VEQcGhEOS1WZC1vNkJsNDQ

# Arts and Communications 

 Communications
## Journalism I <br> Fall or Spring Semesters

Grades 9-10
This course introduces students to the concepts, processes, and practices of journalism. Students will be challenged to think how journalists think and learn what journalists do. This freshman-level course also reinforces basic study skills and introduces some of the software tools used to produce new products.

## Photography I

Grades 9-12

## 1 Semester

An introductory course dealing with the study of such topics as exposure, film types, filters, cameras, lenses, close-up photography, photomicrography, photomicrography and basic techniques and skills of photography.

## Photography II <br> 1 Semester

Grades 9-12
Prerequisite: Intro to Photography
In this class students will further their knowledge learned in Photography 1. Students will explore photography in three different forms: documentation, art, and advertising/photo illustration.

## Broadcast Journalism (Video Production) <br> Grades 10-12

1 Semester or 2 Semesters Prerequisite: Intro to Journalism or Teacher Permission
This course is an introduction to television studio and field production. The course will acquaint students with the technical and aesthetic concepts involved in successful studio and field productions. The student will develop skills through a series of in class, studio and field exercises. They will also critically evaluate past and present production styles. Students will also produce several video productions in school and community. (State Code: 270609, 12/22)

Yearbook
Grades 10-12
2 Semesters
Prerequisite: Honors English class or Introduction to Journalism
This class will produce the yearbook. Students will learn how to write stories and captions, crop and place pictures, establish a theme and carry it throughout the yearbook, and develop page setups. A hands-on environment where the work is done provides for the learning in this class. Students need to fill out an application and be interviewed to be accepted into this program.

Advanced Digital Design
Grade 11 \& 12

## 1 Semester

## Prerequisite: Teacher Permission

Students will focus on developing advanced skills to plan, design, and create interactive projects using the elements of text, graphics, animation, sound, video, and digital imaging in interactive projects. These skills can prepare students for entry-level positions and other occupational or educational goals. (State ID 270613)

## Performance Arts

## Symphonic Band (Marching Band)

 2 SemestersGrades 9-12 instructors. This ensemble will rehearse and prepare music that will be performed at marching band performances, concerts, and pep band performances. The Symphonic Band will function as the marching band and will combine with the concert band for pep band performances. These students will be required to attend a week-long band camp before the first week of school in August. Students in this ensemble will also be required to attend the zero-hour Marching Band class during the first quarter of the school year. This band is a performance-based class and all rehearsals, marching band performances, pep band performances, and concerts are required. Students are encouraged but not required to take private lessons and participate in solo and small ensemble performances as well as state and conference honor bands.

## Percussion

## Grades 9-12

## 2 Semesters

This class will offer the students basic instruction in Percussion. Students will learn the various instruments and techniques used in the percussion section. The percussion class will combine with the Symphonic Band to perform at concerts, marching band performances, and pep band performances. These students will be required to attend a two-week-long percussion and band camp before the first week of school in August. Students in this ensemble will also be required to attend the zero-hour Marching Band class during the first quarter of the school year. This band is a performance-based class and all rehearsals, marching band performances, pep band performances, and concerts are required. Students are encouraged but not required to take private lessons and participate in solo and small ensemble performances as well as state and conference honor bands.

## Varsity Chorus

## Grades 9-12

## 2 Semesters

Varsity Choir will meet daily for two semesters with the purpose of learning to sing correctly and in harmony in mixed (female and male) groups. At least two required performances will be presented. Students will learn to read basic music notation in order to sight sing music. Grades will be given based on participation and occasional singing or written tests. Auditions may be required for admittance into this choir.

## Introduction to Music <br> 1 Semester

Grades 11-12
Intro to Music is an overview of the history of music, from the middle ages to modern times. Includes the elements of music, historical style periods, and major composers and selected works. Students can apply to Central Community College and receive 3 credits for MUSC 1010, Introduction to Music.

## Piano

Grades 9-12

## 1 Semester

Piano class will meet daily for one semester with the purpose of learning to play the piano and read musical notation. Students will progress independently and will complete weekly playing tests for a grade. This class may be taken up to two different times and is limited to 10 students.

## Drama I

Grades 9-12

## 1 Semester

Drama class will provide the structure and production work necessary for the staging of the one-act contest play. Students will gain experience in choosing appropriate play selections, rehearsing scenes, designing accompanying set pieces and background, and gathering materials for stage scenery and properties. Emphasis will be placed on building acting skills through voice, stage movement, characterization, and ensemble staging. Students will be involved with some aspect of the one-act play for production, either as actors or technical support crew. Attendance at all performances of the one-act will be required.

## 1 Semester

Speech is intended to develop speaking skills to useful levels. This class consists of planning, writing, speaking, and listening activities progressing in difficulty. A variety of written/oral projects will be prepared and presented throughout the semester. Early projects consist of brief exercises to get students "on their feet"; speeches become longer and more structured as the semester progresses and delivery skills develop. Research will be involved in two of the projects..

Speech Honors
1 Semester

Grades 10-12

## Prerequisite is regular Speech

Honors speech aims to develop native speaking ability to competency level. Sophisticated and structured informative and persuasive presentations complete the semester. Other projects may include but are not limited to, Interpersonal Communication, Impromptu, Demonstration, Informative, Interpretation, Commentary, and Persuasive; each increasing in degree of achievement. A number of the projects will include research and development into a finished product. This class is open to sophomores, juniors, and seniors.

## Visual Arts

SCOPE AND SEQUENCE

| First Year | 2nd Year | 3rd Year | 4th Year |
| :---: | :---: | :---: | :---: |
| Beginning Art I \& II <br> (Drawing I / 2D Design) | Intermediate Art 3 \& 4 <br> (Drawing II / Ceramics) | Specialized Art <br> (Painting / 3D Design) | Independent Study Art |

## Beginning Art I (Drawing I)

Grades 9-12

## 1 Semester

Students in Drawing I will be introduced to basic fundamentals of drawing. The class will focus primarily on drawing from still lifes, with the addition of exercises to assist in the development of the artist. Media will be limited to charcoal and graphite, both of which will be used on newsprint and drawing paper. Emphasis will be placed on 3-D form, perspective/foreshortening, and media control. Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

## Beginning Art II (Drawing II)

Grades 9-12
1 Semester
Prerequisite: Drawing I
Students in Drawing II will revisit and build upon their knowledge acquired in Drawing I. The class will focus primarily on drawing from more advanced still lifes, but with the addition of new drawing media. Media will include graphite; charcoal; conte crayon; colored pencil; pen \& ink; and marker, on white; gray; and black drawing paper; newsprint; illustration board; and toned paper. Emphasis will be placed on 3-D form, the human figure, and media control. Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

## Intermediate Art 3 (2D Design) 1 Semester

Grades 10-12 media. The class will focus primarily on the principles of design and how they are used and applied within fine art and design. Multiple forms of 2-D media will be used throughout the semester. Emphasis will be placed on balance, unity, rhythm, similarity, proximity, alignment, rule of thirds, visual center, and related concepts. Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

## Intermediate Art 4 (3D Design)

Grades 10-12 1 Semester

Prerequisite: Drawing I, II, 2D Design (C+ or better)
Students should have some background knowledge of art and understand the principles of design and how they are used and applied within fine art and design. The class will focus primarily on space and form in regard to 3D design. Emphasis will be place on line, plane, space, texture, form, and function. Students will be introduced to ceramics. Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

## Specialized Art (Sculpture)

Grade 11-12
Fall Semester
Prerequisite: Drawing I, II, 2D Design, 3D Design
Students should have a good background in art and be able to display their skills adequately. The class will focus primarily on space and form in regard to 3D design. Emphasis will be placed on line, plane, space, texture, form, and function. Media will involve wood, mixed media, plaster, and a final group project of inflatables. Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

Students should have a good background of art and be able to display their skills adequately. The first semester of class will focus primarily on the application techniques and how they differ from the other. Media will include watercolor, acrylic and oil paints. Students will also experiment on different painting surfaces. The second semester of class will focus primarily on the techniques and ideals from the Renaissance up to modern western art. Media will be limited to ONLY acrylic and oil paints Students will be evaluated on: (1) individual skills on each project (2) class participation (3) tests/quizzes (4) sketchbooks. Special Equipment: Sketchbook \& Drawing Pencil

## Graphic Design

## Grades 10-12

1 Semester
Graphic Design is a term used to express visual communication. It requires discipline, computer skills and an extensive design vocabulary. This class is an introduction of basic art elements, principles of design and typography. It emphasizes the designing process and communication principles. Students will use Adobe Photoshop, Adobe Illustrator and Adobe Indesign. Through this class students will learn effective ways to communicate visually through their work and verbally during critiques.

# Business \& Computer Science 

## Business

Introduction to Business (state code 032300)<br>Grades 10-12<br>1 Semester<br>This course is designed to introduce students to the Business, Marketing, and Management Career Field which focuses on organization, economics, management, marketing, financial management, and operations. Career opportunities and technology will also be used and discussed.

## Marketing Management (state code 038101) <br> Grades 10-12 1 Semester Prerequisite: passing Introduction to Business Marketing Management furthers student understanding and skills of the marketing functions and strategies including pricing, product/service management, channel management, promotion, and marketing-information management. We will also look at basic concepts of management and leadership within a business or organization.

## Accounting I (state code 030501) Grades 11-12 2 Semesters <br> Prerequisite: passing grade on basic math pretest

This year-long course covers a service business organized as a sole proprietorship which will include accounting principles involved in the preparation and maintenance of financial records concerned with business management and operations. It is a comprehensive introduction to basic accounting including recording, summarizing and reporting, principles of income measurement and asset valuation, and accounting systems and controls. Students are exposed to careers in the accounting field and are given the opportunity to perform accounting applications using technology.

## Accounting II

2 Semesters
(state code 030502)
Grades 11-12

## Prerequisite: Accounting I

This year-long course will develop accounting skills that build upon those acquired in Accounting I. Students will continue to apply concepts of double-entry accounting systems related to a merchandising business organized as a corporation. Additional accounting skills will be developed, including preparing and journalizing payroll records, calculating, recording, and adjusting entries, and interpreting financial information. Students are given the opportunity to explore career-related skills and perform accounting applications using technology. Accounting 1 is a prerequisite to this course.

## Small Business/Entrepreneurship (state code 032370)

Grades 11-12

## 1 Semester

Entrepreneurship is a course with emphasis on the evaluation of the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. The role of entrepreneurial businesses in the United States and the impact on the national and global economy will be explored.

## Computer Science

SCOPE AND SEQUENCE

| Program of Study | Introduction Course | Intermediate Course | Advanced Course |
| :--- | :--- | :--- | :--- |
| Computer Science | Intro to Computer <br> Science \& Technology | Computer Science <br> Principles I (2 <br> semesters) | Computer Science <br> Principles II (2 <br> semesters) |
| Cybersecurity |  | Cybersecurity |  |

Intro to Computer Science \& Technology

## Computer Science Principles I (Java Script)

Prerequisite: Intro to Computer Science \& Tech
This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science. It gives a foundation in the tools used in computer science and prepares students for further study in computer science, including Computer Science A courses. (State name Computer Science Principles, 270703)

## Computer Science Principles II (Java Script)

Grades 11-12

## 2 Semesters

Prerequisites: Intro to Computer Science I (Python)
The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity, and how computing impacts our world. Students will develop the computational thinking skills needed to fully exploit the power of digital technology and help build a strong foundation in core programming and problem-solving. (State: Computer Science A, 270701)

Cybersecurity
Grades 10-12

## 2 Semesters

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Students will solve problems by understanding and closing these vulnerabilities. This course raises student's knowledge of and commitment to ethical computing behavior. (State: Cybersecurity, 270707)

## Languages

French I
Grades 9-12
2 semesters
French $I$ is an introduction to the French language for beginners. Emphasis is placed on oral usage of the language, as well as on certain basic structures in writing. Correct pronunciation and intonation are stressed. New vocabulary is presented thematically with a focus on daily-life topics. Most sentence structures are only in the present tense.

## French 2

Grades 10-12
2 semesters
Prerequisite: French I or Placement Test
Emphasis is placed on strengthening the four basic language skills of listening, speaking, reading, and writing. Students will work to attain an acceptable degree of proficiency in the four skill areas. The language will be presented within the context of the contemporary French speaking world. Emphasis is placed on the past tense.

## French 3-Honors

2 semesters
Grades 11-12
This course assumes that students have completed a basic language sequence. French III is a comprehensive review and thorough understanding of the elements of the French language and culture. Emphasis is placed on review of the past, present tenses and introduction of the future.
Honors requirements will be followed.

## French 4 - Honors

Grades 12
2 semesters
Prerequisite: French III or Placement Test
French IV will continue the language skills of listening, speaking, reading \& writing. Classic French literature will be explored through reading, translation, \& discussion. Emphasis is placed on the imperfect and the past tense, subjunctive and the future. Honors requirements will be followed.

## Spanish Language Scope and Sequence <br> Placement will be based on testing and teacher recommendations.

|  | 9TH GRADE | 10TH GRADE | 11TH GRADE | 12TH GRADE |
| :--- | :--- | :--- | :--- | :--- |
| Non Spanish <br> Speakers | Spanish 1 | Spanish 2 | Spanish 3 (H) | Spanish 4 (H)/SPAN 201- <br> UNK |
| Spanish Speakers | Intermediate <br> Spanish 1 | Intermediate <br> Spanish 2 | Spanish 3 (H) | Spanish 4 (H) -SPAN 201-UNK |
| Advanced Spanish <br> Speakers | Advanced <br> Spanish 1 | Advanced <br> Spanish 2 | Spanish 4 (H) -SPAN 201-UNK | Spanish 5 (H)/SPAN 205-UNK |

Spanish 1
Grades 9-12
2 semesters
Spanish 1 is an introduction to the Spanish language for beginners. Emphasis is placed on oral usage of the language, as well as on certain basic structures in writing. Correct pronunciation and intonation are stressed. New vocabulary is presented thematically with a focus on daily-life topics.

Intermediate Spanish 1
Grades 9-12
2 semesters Prerequisites: Previous Spanish experience (at home and/or dual-language)
Intermediate Spanish 1 is an introduction to the Spanish language for students who have had previous exposure to Spanish (at home, in school, etc.). Emphasis is placed on reading and writing the language, as well as on certain basic structures in writing. Correct pronunciation and intonation are stressed. New vocabulary is presented thematically with a focus on daily-life topics.

## 2 semesters

Advanced Spanish 1 is a basic Spanish class geared toward students who already have good Spanish speaking abilities. Emphasis is placed on grammar, culture and literature. Students will enhance their literacy skills while increasing their understanding of the various Spanish-speaking countries of the world.

## Spanish 2

Grades 9-12
2 semesters
Prerequisite: Spanish 1 or Placement Test
Emphasis is placed on strengthening the four basic language skills of listening, speaking, reading, and writing. Students will work to attain an acceptable degree of proficiency in the four skill areas. The language will be presented within the context of the contemporary Spanish speaking world.

Intermediate Spanish 2
Grades 9-12
2 semesters Prerequisites: Spanish 1 and previous Spanish experience (at home and/or dual-language)
Intermediate Spanish 2 has an emphasis on continuing in the development of reading, and writing for students who have previous exposure to Spanish. Students will work to attain an acceptable degree of proficiency in the four skill areas (speaking, listening, reading, and writing). The language will be presented within the context of the contemporary Spanish speaking world.

## Advanced Spanish 2

Grades 9-12
2 semesters
Prerequisite: Spanish 1 or Placement Test
Advanced Spanish 2 is another course geared toward students who have a strong foundation of Spanish speaking abilities. Students will continue to strengthen their grammatical abilities and higher level reading skills. The students will also further their knowledge of various Spanish-speaking countries around the world.

## Spanish 3 -Honors

Grades 9-12
2 semesters
Prerequisite: Spanish 2 or Placement Test
This course assumes that students have completed a basic language sequence. Spanish 3 is a comprehensive review and thorough understanding of the elements of the Spanish language and the highlights of Hispanic culture. This course and materials will be taught primarily in the Spanish language.

## Spanish 4 - Honors

## Grades 9-12

2 semesters
Prerequisite: Spanish 3 or Placement Test
Anyone who has completed Spanish 3 or is a native speaker qualifying through placement, can take this class. Students will reinforce, expand and enrich their Spanish literacy through reading, writing and exploring Hispanic culture. This course and materials will be taught primarily in the Spanish language. Students can take this class for dual credit through UNK, SPAN 201 -- Intermediate Spanish 2 (3 credit hours).

Spanish 5 - Honors
Grade 12

Spanish 5 is an advanced grammar and vocabulary course that builds from the work completed in Spanish 4/UNK Spanish 201. Prerequisite: Spanish 4/UNK Spanish 200. Students can take this class for dual credit through UNK, SPAN 205 - Culture, Conversation and Composition (3 credit hours).

# Family and Consumer Science 

## Intro to Family \& Consumer Science (FACS)

Grades 9-10

## 1 Semester

This course is designed to introduce students to Family \& Consumer Sciences including Foods \& Nutrition, Budgeting, Textiles \& Sewing, Child Development, Relationships, and Interior Design, as well as, Career Planning and Readiness.

## Clothing \& Textiles

Grades 10-12
Fall Semester
Limit of 15 students
Course is designed for the student who wishes to gain skills in fabric and clothing construction. It will provide opportunities to develop skills in basic hand sewing as well as becoming accomplished at using a sewing machine. The student will learn to recognize basic textile properties as they apply to fabric and apply sewing techniques in actual construction. Students will complete several sewing projects. Careers related to design \& merchandising will be explored. Special Equipment: Pants kits.

## Clothing \& Design

Spring Semester

## Prerequisite: Successfully completing Clothing \& Textiles

## Limit of 15 students

This class will build on skills successfully learned in Clothing and Textiles. Several design projects will be completed as a class. Each project is designed to challenge student's abilities. Reading written instructions while successfully putting projects together will be emphasized. Careers related to entrepreneurship will be explored. Students will have some project material costs.

## Foods \& Nutrition I (state code

Grades 10-12

## 1 Semester

This semester course will review food terminology, abbreviations, equivalents, and measuring techniques. Proper nutrition, wise buying, preparation, storage of foods, and safety will be stressed throughout the course. Lab experience will consist of preparing: breakfast meals, fruits and vegetables, microwave cooking, pizzas, cookies, and cake pops. Menu planning, preparation and serving, as well as employment in the field of hospitality services will be introduced. Students are required to cook at home 2 times during the semester.

Foods \& Nutrition II
Grades 10-12
1 Semester
Prerequisite: Successful completion of Foods I
This course is designed to promote more in depth interest and understanding of the principles of food preparation, menu planning, consumerism, special diets, and social graces. Course lab experiences will be selected from units covering meat cookery, breads, pies, desserts, and cake decorating. Hospitality service careers will be explored. Students are required to cook at home 3 times during the semester.

## Home \& Interior Design

Grades 10-12

## 1 Semester

This class focuses on the development of efficient, appealing room and floor plans that meet the needs of residential clients. The elements \& principles of design and decorating are primary areas to be covered. Students will be able to recognize good design, and develop good taste related to this field. Students will explore architectural designs of houses, types of homes, floor plans, roof styles and employment opportunities in the field. Careers in this field will be explored. Students will complete one design project to take home. Special Equipment: Black fine point markers.

## 1 Semester

This is the study of children emphasizing their physical, mental, emotional, social growth, and development from conception through age 12. Special needs children, community services, and related human growth and development careers such as teaching, social work, nanny services, etc. will be explored. Personal observations of children will be made available through field trips to childcare centers and/or by conducting a preschool lab in the department. Parenting skills will be a main focus throughout the course. Students will have the opportunity to take home the computerized baby.

Early Childhood Education Fall Semester

Grades 11-12
In this course, students will explore education for young children through observation, interaction, and lesson planning. Post-secondary and career options related to young children will be explored.

## Early Childhood Practicum

Grades 11-12
Spring Semester BLOCKED (2 periods a day) Prerequisite: Early Childhood Education
This course is designed to provide students a hands-on early childhood education experience. The class will include an early childhood environment in which students are actively teaching young children.

# Health Sciences 

## Health Sciences I

Grades 11-12

## 1 Semester

This course is designed to introduce students to career opportunities and related skills in the Health Science career field. Students will explore topics related to; health informatics, biotechnology research, therapeutic certificated services, behavioral health, life span performance and allied/public health. This course also focuses on cost and educational requirements of health science professions, ethical and legal responsibilities, the history and economics of health care.

## Health Sciences II

Grades 11-12
1 Semester Prerequisite: Pass Health Sciences I and Teacher Permission
This course is a continuation of the Health Sciences I course and is the second course in a three course sequence. Instruction includes anatomy and physiology, medical terminology, medical ethics and law, diseases and disorders, positive and negative health and wellness behaviors, and basic first aid. Students will gain skills related to continuing in the health sciences career field.

## Certified Nursing Assistant (CNA)

Grades 11-12

## 1 Semester

## Prerequisite: Health Sciences

Basic nursing knowledge and skills course for the nurse assistant in a healthcare setting. Meets the requirements of Public Law 100-2-3 OBRA and is approved by the Nebraska Department of Health. An approved nursing assistant is any person, other than a registered nurse or licensed practical nurse, who provides nursing or nursing-related services for pay. A nursing assistant must be at least sixteen (16) years of age, cannot have been convicted of a crime rationally related to his or her practice involving moral turpitude, must successfully complete a basic nursing assistant course and testing approved by the State Department of Health and Human Services Regulation and Licensure Credentialing Division (State Department of Health and Human Services). Enrollment is limited to 16 students.
The course curriculum must contain the following:

- At least 16 hours in the following areas: communication and interpersonal skills, infection control, safety/emergency procedures, including the Abdominal Thrusts, promoting patients' independence, respecting patient rights
- Basic nursing skills
- Personal care skills
- Mental health and social service
- Care of cognitively impaired patients
- Basic restorative services
- Patient rights
- 16 hours of supervised practical training in a laboratory, nursing facility or other setting in which the student demonstrates knowledge while performing tasks on an individual under the direct supervision of a RN or LPN
(Students will earn credit through Central Community College - HLTH 1200)


## Médication Aide (MA)

Grades 11-12
Spring Semester
Prerequisite: Certification Nursing Assistant
This course is designed to train the beginning Medication Aide to provide a safe way for individuals other than licensed health care professionals (doctors, nurses, etc.) to provide medications to individuals who are not able to take medications by themselves. (Students will earn credit through Central
Community College - HLTH 1210)

# Physical Education 

## Team Games/Health Education 2 semesters

This class will deal with general physical fitness for life. Students will learn the basic rules, strategies, history of the sport as well as how to play the most common sports in the United States today. Sports/units that will be covered are: Volleyball, Basketball, Soccer, Badminton, Baseball/Softball, Kickball, Horseshoes, SNAG Golf, Ping Pong, Tennis, Spikeball, Pickle Ball, Ultimate Frisbee, Bowling, Four Square, Checkers/Chess/Pitch. Students will also participate in one day of physical conditioning and reading/writing per week. This class looks at each area of a person's health in an attempt to help students gain a better understanding of their own health. Students will be able to use this new knowledge to hopefully make better life choices that will allow them to accomplish their goals in life. We will cover the following topics throughout the semester: Goal Setting and Self-Responsibility, Exercise and Fitness, Nutrition, an Introduction to the Skeletal and Muscular System, Diseases and Disorders, Alcohol, Tobacco and Other Drugs, and Reproductive Health.

## Beginning Strength \& Conditioning/Health Education

 2 SemestersGrades 9-12
This is an entry level physical performance class where students will learn basic strength and conditioning techniques/practices. Students will participate in a structured program of lifting, conditioning and agility. Strength building programs will be designed for students to be performed two days per week, with one day per week reserved for agility/speed/balance/mobility/stability training, one day per week for general conditioning and one day per week for reading/writing/lecture/learning labs. Physical testing will be used to evaluate individual student progress. Students may register for more than one year of this class. This class looks at each area of a person's health in an attempt to help students gain a better understanding of their own health. Students will be able to use this new knowledge to hopefully make better life choices that will allow them to accomplish their goals in life. We will cover the following topics throughout the semester: Goal Setting and Self-Responsibility, Exercise and Fitness, Nutrition, an Introduction to the Skeletal and Muscular System, Diseases and Disorders, Alcohol, Tobacco and Other Drugs, and Reproductive Health.

Advanced Strength \& Conditioning/Health Education 2 Semesters

Grades 10-12
This is a high physical performance class dealing with total strength and conditioning techniques/practices for those students who want to increase their overall athletic/physiological potential through strength and conditioning. Students will participate in a very structured and challenging program of lifting, conditioning, agility and plyometrics. Strength and conditioning programs will be designed for students to be performed three days per week with one day per week reserved for agility/speed/balance/mobility/stability training and one day per week reserved for reading/writing/lecture/learning labs. Physical testing will be used to evaluate individual student progress. Students may register for more than one year of this class.

## Sports Officiating 1 semester Prerequisite: Teacher Permission Only

## LIMIT 12 Students

Additional Requirement: Must have passed either Team Games or Strength and Conditioning and been in good standing at the end of the class.
This class will provide students with a unique opportunity to explore sports in a different way and possibly open doors to future job opportunities. Students will learn the rules of each sport, how to keep book \& how to officiate the sports of Basketball, Football, Volleyball, Soccer \& Baseball/Softball. Students will have in class lessons, reading/writing opportunities and will practice officiating during Team Games classes.

# Foundations and Passages 

## Foundations of Leadership <br> 2 Semesters

Foundations of Leadership is designed to enhance and support the learning experiences of incoming $9^{\text {th }}$ grade students to become knowledgeable, responsible, and caring students as they transition into high school. Students will be active partners in creating an environment that both promotes strategies for academic success and excellence, and also integrates social and emotional learning.
Students will build and reinforce life skills and social competencies that include effective communication skills, goal articulation and role intellection, critical thinking, collaborative problem solving and decision making, organizational skills, stress management, intrapersonal/interpersonal skills, appreciating cultural diversity and cultural contributions, and a positive contributory service. Activities will include storytelling, group discussion, self-awareness, self-reflection, artistic expression, play, and cooperative and small group learning.

## Senior Passages

Grade 12

## 1 Semester

Senior Passages is designed to help you make the most of the major transition you find yourself engaging in, to provide structures in which to address the many concerns that will arise at this time, and to prepare consciously for the life that lies ahead of you. To help with that preparation, we will explore the wisdom of others through writing and literature, through your own sharing, and through play. You will learn skills for making decisions that can minimize the stress in your lives, as well as the skills you need to cope with the stress you do have. You will also develop capacities for activating your imagination and creativity, especially through visual arts. Throughout the process, as you become more aware of your own interests and strengths, you will be identifying areas in the community where those interests and strengths are valued and needed.

## Service and Internship

## Requirements for Cadet and Business Internship:

- Students must pass all classes in the previous semester and have an exemplary disciplinary and attendance history to participate in a service/internship program.
- Students will be required to have signed permission to participate.
- Students may not Cadet or Intern for family member or family owned business
- Students must be able to provide their own transportation daily and parent permission form must be submitted before beginning.
- It is the student's responsibility to make contact with Cadet teacher or Business to arrange this experience
- Students are only allowed to be either an Intern or Cadet during a semester.


## Cadet Teacher

Grades 11-12

## 1 Semester

The Cadet Teacher program is a class for 11th \& 12th grade students. Students will be taught about the qualities of a good teacher and different teaching techniques. Students will be assigned elementary students to work with daily, and will work with the elementary teachers and the coordinator to make sure curriculum goals are accomplished and prepared by the coordinator and carried out by the high school students. Volunteer a little of your time and make a difference in someone's life!

## Business/Health/Internship <br> 1 Semester

The Lexington High Youth Internship Program is a training program between schools and business/industry designed to prepare a student for a specific business/industry occupation. The program integrates academic instruction, structures vocational/technical training. Student's work closely with skilled workers to learn the skills associated with the workplace of the future. Students must show a strong academic record and have a good record of responsibility and citizenship.

# Special Programs English Language Learner (ELL) Academy 

Students are placed within these three Tiers according to English language testing. We currently offer four levels within these classes with some Tier classes being taught as a higher and lower ability student.

Our main purpose for our ELL/SLIFE students is to help them build their English language skills through language acquisition both linguistically and developmentally. The purpose is to build skills as rapidly as possible to bridge the gap between ELL students and their grade-level peers. Once they have built that foundation of language acquisition we can focus and move towards content areas. As nice as it would be to go right to the content of our subjects, the realistic aspect is that our students need time and structure with the language first, building a strong foundation will help in all areas of their education down the road.

> Lexington High School
> *LL 4-Year Graduation Plan (For students who start in NC level)

| New Comer Level | Level 1 | Level 2 |  |
| :---: | :---: | :---: | :---: |
| ENGLISH (40 credits required) |  |  |  |
| ELL English NC (0 English credits) | ELL English T1 (10 English credits) | ELL English T2 (10 English credits) | English 1 ES (10 English credits) |
|  |  | ELL Reading T2 for second semester (10 English credits) |  |
| MATHEMATICS (30 credits required) |  |  |  |
| ELL Math NC (0 math credits) | ELL Math T1 <br> (10 math credits) | ELL Math T2 <br> (10 math credits) | Pre-Algebra or Algebra 1A (10 math credits) |
| SCIENCE (30 credits required) |  |  |  |
| ELL Science NC (0 science credits) | ELL Science T1 (10 science credits) | ELL Science T2 (10 science credits) | Applied Science (10 science credits) |
| SOCIAL STUDIES (30 credits required) |  |  |  |
| ELL History NC ( 0 soc. studies credit) | ELL History T1 <br> (10 soc. studies credit) | ELL History T2 <br> (10 soc. studies credit) | American History ECT <br> (10 soc. studies credit) |
|  |  |  | American Gov ( 5 soc. studies credit) |
| PE/HEALTH (10 credits required) |  |  |  |
| ELL Team Games ( 10 credits PE/Health) |  |  |  |

## Alternative Education

Placement in Alternative Education can only be made upon the recommendation of an administrator after determining how the student's needs can best be met by placement in alternative education. Students may complete one or more courses at a time in an independent learning educational setting. Once a student has moved to alternative education, he or she will remain there for the remainder of the semester or school term.

# Developmental Learning Program (DLP) \& Individualized Learning Program 

Students are admitted based on Individual Education Plan (I.E.P.)

| 2023-2024 | 2024-2025 | 2025-2026 | 2026-2027 |
| :--- | :---: | :---: | :---: |
| DLP Geography/Personal <br> Finance | DLP Social Studies | DLP Social Studies | DLP Am Government |

## Developmental Learning Program (DLP) English

2 Semesters
Assessment
The DLP English 1 course is designed for students who need individualized accommodations and modifications to be successful with the English 1 curriculum. Course curriculum is parallel to the general education curriculum and aligned with the Nebraska Department of Education Science Standards for students with Disabilities. Students are in a classroom setting with a low student to teacher ratio. Adaptations are based on the three levels of the Response to Intervention Model and are highly individualized.

## Developmental Learning Program (DLP) Math

 2 SemestersAssessment
The DLP Math 1 course is designed for students who need individualized accommodations and modifications to be successful with the Math 1 curriculum. Course curriculum is parallel to the general education curriculum and aligned with the Nebraska Department of Education Science Standards for students with Disabilities. Students are in a classroom setting with a low student to teacher ratio. Adaptations are based on the three levels of the Response to Intervention Model and are highly individualized.

## Developmental Learning Program (DLP) Science

2 Semesters Assessment
The DLP Physical Science course is designed for students who need individualized accommodations and modifications to be successful with the Physical Science curriculum. Course curriculum is parallel to the general education curriculum and aligned with the Nebraska Department of Education Science Standards for students with Disabilities. Students are in a classroom setting with a low student to teacher ratio. Adaptations are based on the three levels of the Response to Intervention Model and are highly individualized.

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## Career Exploration Intro.

Grades 10-11 and/or
1 Semester
Teacher Recommendation/Assessment
The main goal of Career Exploration class is to allow students to investigate the myriad of career and occupational options available to them and to provide opportunities to explore these choices. This course is designed as an introductory class for students to learn more about each of the jobs found in the sixteen nationally identified career clusters and to identify the job descriptions, qualifications, requirements, benefits, and career outlook of each. Concurrently, students will begin to explore and identify their own personal preferences, strengths, needs, values, personality traits, skills, and goals. In addition, students will develop an understanding of workplace competencies and work to develop these traits. Students are required to develop and maintain a career exploration portfolio for the semester.

## Functional Career Preparation

2 Semesters

## Grades 11-12 and/or Teacher Recommendation, Assessment

The main focus of Functional Career Prep class is preparing students for "post-school" and transition to the world of work. Students will complete units of study that include self-assessment, career exploration, decision making, getting a job, keeping a job, and work-related social skills. Emphasis is placed on students developing the functional abilities, knowledge, and processes needed to make realistic career choices and to gain experience in various work-related areas. Students are required to develop and maintain a portfolio throughout the school year.

## Senior Transitions/Career Planning

 2 SemestersGrade 12 and/or Teacher Recommendation, Assessment
This course is designed to help students develop and demonstrate the skills, knowledge, and process needed to make realistic career choices. This includes developing a better understanding of self in various areas, learning about the career clusters and exploring areas that are "best fits", developing community awareness, citizenship, and decision-making skills, expanding self-determination and self-advocacy skills, exploring postsecondary options, learning and practicing the skills needed to get and keep a job, becoming familiar with resources available, learning and practicing work-related social skills, and further exploring career interests. Transition emphasis in this class is into some type of post-secondary vocational, technical, or college educational setting and then into a selected career field. Students are required to develop and maintain a portfolio throughout the school year.

## PEERS

## Grades 10-11 and/or

1 Semester Teacher Recommendation/Assessment
PEERS class is designed to help students focus on developing friendships and relationships. This class will help students develop strategies for handling peer rejection and conflict, friendships, and dating. The skills taught in this class will help students make friends and develop friendships during high school as well as later in college or the workforce.

## Adaptive PE

## 2 Semesters

## Assessment

Students will focus on motor and physical skills needed to perform everyday tasks. Instructional needs will be based on the individual educational plan for each student.

## Individualized Learning Functional English I

## 2 Semesters

Assessment
Students will focus on developing a sight vocabulary for everyday words used in school and in the community. Students will be responsible for learning basic concepts such as ABC's, days of the week and months of the year. Students will use basic writing skills to produce both manuscript and cursive writing. Instructional needs will be based on the individual educational plan for each student.

## Individualized Learning Skills Personal Care <br> Assessment 2 Semesters

This course is designed to help students learn to advocate for themselves. They will be responsible for learning daily living skills such as the calendar and the weather. Students will also be responsible for taking care of their personal hygiene during this time period. Students will have their own personal space to store their hygiene items and will perform specific hygiene and self check steps daily.

## Individualized Learning Independent Living 2 Semesters

Assessment

This course is designed to provide emphasis on pre-readiness skills and guidance for the adult world/community. Students will participate in a variety of different daily activities during this time period such as fitness, shopping, going out to eat, cooking, going to library, going on educational field trip, recollection group meeting and arts \& crafts. Daily living skills will be emphasized and promoted. Prevocational skills will be offered at individual need and level. This class will be a two-hour block of time.

## Individualized Learning Employment Today 2 Semesters

This course is designed to provide emphasis in work readiness and transition skills to help prepare students for post-secondary placement. Students will complete and use interest inventories to help them decide on job placement. Freshmen and sophomores will participate in in-school job-sites and juniors and seniors will participate in community job-sites. This class will be a two-hour block of time.

## Individualized Learning Life skills II 2 Semesters

This course is designed to teach the beginning concepts of daily living skills. Students will gain experiences in the use of home/kitchen safety, use of cooking utensils and appliances, household maintenance, community facilities use and basic sewing skills. Recommendation by counselor or instructor.

## Skill Support

## ACT Prep/College Prep

Grade 11

## Spring Semester

The ACT/College Prep course will emphasize ACT test-taking strategies, specifically math skills, language skills, reading skills, and science-reasoning skills. ... All four ACT subtests will be reviewed: English, Math, Reading, and Science Reasoning.

## Reading Skills

## 1 Semester or 2 Semesters <br> Assessment

Reading Skills is a course required for any Lexington High School $9^{\text {th }}-10^{\text {th }}$ grade student who scores 224 or below on the MAP reading test. Students will work on increasing their reading achievement by using READ 180. The reading course will be a required elective course to help students advance to their present grade level. Once they reach their reading grade level, they will exit the class at semester. If the student has not reached grade level by the end of the semester, or his/her case manager requests that he/she still needs the reading class, then they will continue to take the class until they read at grade level.

## Content Mastery

Assessment/Teacher Recommendation

## 2 Semesters

This course will provide an opportunity for students to complete teacher assigned activities and projects. Students will learn techniques in note taking, keep track of pre-assigned assignments and demonstrate timely completion of pre-assigned tasks. Students will also use time to review data, outline material, answer questions relating to class work and increase vocabulary within the regular class assignments.

## Write On

Grade 11 1 Semester Assessment
"Write On" Intensive ELL Writing Course: This class focuses on all aspects of the writing process. Skills such as sentence structure, grammar, single paragraph, and multiple paragraph persuasive writing are addressed and practiced. The writing process is modeled and applied in whole group, small group, partner, and individual settings. Students placed in this class have been identified as English Language Learners (level II, level III, or level IV) according to ELDA test results. Objective: Students will ultimately work toward showing proficiency on the $11^{\text {th }}$ grade Nebraska State Writing Exam (NeSA Writing).
Curriculum: The Write Tools

# Jump Start Into College 

## Dual Credit Classes Offered through LHS

LHS offers several opportunities for students to earn dual credit. The district shall pay for the cost of textbooks and class materials but students are responsible for tuition and all other course fees. Students and parents are responsible to check with the student's college of choice to determine if a class is transferable for their program. Nebraska colleges and universities have agreements for transfer; and equivalent classes can be researched at Transfer.nebraska.edu.

## College Transcripts

College transcripts can be ordered from the college that the student took their course from to be sent to the college they will be attending. It is the student's responsibility to order their transcripts to be sent to the college of their choice. LHS is not able to do this for students.

## Additional College Options

Online college classes or college classes offered at the CCC-Lexington Center
Students in good standing can take online classes or classes offered at the CCC-Lexington Center. Students will need to be able to work independently through college level material. The student will pay for the tuition and books, and provide their own transportation. Lexington High School credit will not be offered for these classes and the grade will not be included in the student's LHS gpa or listed on their LHS transcript.

## Dual Credit College Classes Offered at LHS

## University of Nebraska in Kearney

| LHS Name | Semester credit <br> issued | College Name \& Number | Credit <br> Hours | Cost 23-24 | Transfer to UNL |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Spanish 4 | Fall (full year class) | SPAN 201 -- Intermediate Spanish II | 3 | $\$ 225+\$ 45$ APP FEE | SPAN 202 |
| Spanish 5 | Fall (full year class) | SPAN 205 -- Culture Conversation \& Composition | 3 | $\$ 225+\$ 45$ APP FEE | SPAN 204 |

## Central Community College

Iwo Year Associate's Degree

| LHS Name | Sem credit issued | Map or ACT Scores required | College Name \& Number | Credit Hours | $\begin{gathered} \text { Cost } \\ 23-24 \end{gathered}$ | Transfer to UNL <br> \& UNK | Transfer to Metro CC | Transfer to Mid-Plains CC | Transfer to Southeast CC | Transfer to Northeast \& Western CC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Technical Math | Spring | MAP <br> *Fall 225 <br> *Spring 234 | MATH 1020 -Technical Math | 3 | \$48 | No | $\begin{aligned} & \text { MATH } \\ & 1240 \end{aligned}$ | MATH 1020 | MATH 1020 | No Transfer listed |
|  <br> Technical <br> English | Spring | $\begin{aligned} & \text { Map - 223, } \\ & \text { ACT - } 17 \end{aligned}$ | ENGL 1000 - Applied Writing | 3 | \$48 | No | $\begin{aligned} & \text { ENGL } \\ & 1010 \end{aligned}$ | ENGL 1040 | ENGL 0980 | No Transfer listed |
| Concepts of Electronics | Fall | None | INDT 1100 -Concepts of Electronics | 3 | \$48 | No |  |  |  |  |
| Mechatronics Instrumentation | Spring | None | INDT 1800 - Introduction to Instrumentation | 3 | \$48 | No |  |  |  |  |
| Intro to <br> Programmable Controls-Mechat ronics | Fall | None | INDT 1200 - Introduction to Programmable Controls | 3 | \$48 | No |  |  |  |  |
| App of Industrial Sensors-Mechatr onics | Spring | None | INDT 2410 -Application of Industrial Sensors | 3 | \$48 | No |  |  |  |  |

## Central Community College

Four Year College Degree

| LHS Name | Sem credit issued | Map or ACT Scores | College Name \& Number | Credit Hours | Cost 23-24 | Transfer to UNK | Transfer to UNL | Wayne State |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| College Algebra | Spring | $\begin{aligned} & \text { АСТ - } 22 \text {, } \\ & \text { Map- } 249-251 \end{aligned}$ | MATH 1150 - College Algebra | 3 | \$48 | $\begin{aligned} & \text { MATH } \\ & 102 \end{aligned}$ | $\begin{aligned} & \text { MATH } \\ & 101 \end{aligned}$ | MAT 121 |
| Pre-Calculus | Fall (full year class) | $\begin{aligned} & \text { ACT - } 22, \\ & \text { Map - } 249 \end{aligned}$ | MATH 1410 - Pre-Calculus | 5 | \$80 | $\begin{aligned} & \text { MATH } \\ & 103 \text { (3 cr) } \end{aligned}$ | $\begin{aligned} & \text { MATH } \\ & 103 \text { (5 cr) } \end{aligned}$ | $\begin{aligned} & \text { MAT } 130 \\ & (5 \mathrm{cr} \end{aligned}$ |
| Analytic/Geometry \& Calculus I | Fall (full year class) | $\begin{aligned} & \text { ACT - } 25, \\ & \text { Map - } 259 \end{aligned}$ | MATH 1600 - Analytic/Geometry \& Calculus I | 5 | \$80 | $\begin{gathered} \text { MATH } \\ 115 \end{gathered}$ | $\begin{gathered} \text { MATH } \\ 106 \end{gathered}$ | MAT 140 <br> (5 cr) |
| College English I | Fall |  | ENGL 1010 - English Composition I | 3 | \$48 | ENG 101 | $\begin{gathered} \text { ENGL } \\ 150 \end{gathered}$ | ENG 102 |
| College English II | Spring |  | ENGL 1020 - English Composition II | 3 | \$48 | ENG 102 | $\begin{gathered} \text { ENGL } \\ 151 \end{gathered}$ | ENG 150 |
| Intro to Music | Fall/Spring |  | MUSC 1010 - Intro to Music | 3 | \$48 | MUS 100 | $\begin{aligned} & \text { MUNM } \\ & 276 \mathrm{G} \end{aligned}$ | MUS 166 |
| Western Civilization (H) | Spring |  | HIST 1010 - Western Civilization After 1700 | 3 | \$48 | HIST 211 | HIST 131 | HIS 120 |
| College Biology | Fall (full year class) |  | BIOS 1010-General Biology | 4 | \$64 | BIOL 103 | $\begin{aligned} & \text { BIOS } \\ & \text { 101/101L } \end{aligned}$ | $\text { BIO } 110$ $(4 \mathrm{cr})$ |
| Chemistry (H) | Fall (full year class) | ACT - 19, <br> Map - 240 <br> (waiver not <br> excepted) | CHEM 1050-Elements of Chemistry | 4 | \$64 | $\begin{aligned} & \text { CHEM } \\ & 145 \end{aligned}$ | $\begin{aligned} & \text { CHEM } \\ & 105 \end{aligned}$ |  |
| Chemistry II | Fall (full year class) | АСТ-19, <br> Map - 240 <br> (waiver not <br> excepted) | CHEM 1090-General Chemistry I | 4 | \$64 | $\begin{aligned} & \text { CHEM } \\ & \text { 160/160L } \end{aligned}$ | $\begin{aligned} & \text { CHEM } \\ & 109 \end{aligned}$ |  |
| Nursing Assistant | Fall/Spring | NONE | HLTH 1200-Nursing Assistant (CNA) | 3 | \$105 |  |  |  |
| Medication Aide | Spring | CNA | HLTH 1210 - Medication Aide (MA) | 3 | \$105 |  |  |  |

[^1]
[^0]:    Developmental Learning Program (DLP) Social Studies (includes American Government and Personal Finance) 2 Semesters

    Assessment
    The DLP Social Studies course is designed for students who need individualized accommodations and modifications to be successful with the Social Studies curriculum. Course curriculum is parallel to the general education curriculum and aligned with the Nebraska Department of Education Science Standards for students with Disabilities. Students are in a classroom setting with a low student to teacher ratio. Adaptations are based on the three levels of the Response to Intervention Model and are highly individualized.

[^1]:    *only the above college classes will be included on LHS transcript

