

United High School

COURSE DESCRIPTIONS

2017 -2018

This curriculum description booklet has been prepared to assist students and parents in planning high school courses and schedules. All courses offered at United High School are included in this booklet, along with prerequisites, credit given in each course, whether the course is elective or required, the year the course is offered and may be taken, and a description of each course.

Requirements for High School Graduation

Students must complete 22 credits and complete the following course requirements.

English – 4 credits

Mathematics -3 credits- including Informal Geometry or Geometry

Science -2 credits for class of 2016- 2018 (3 credits for the class of 2019 and beyond)

Social Studies -3 credits, 1 credit must be U. S. History

Physical Education - 4 credits

Driver Education - 1/2 credit

Consumer Education - 1/2 credit

Health Education - 1/2 credit

1 credit chosen from music, art, foreign languages, or vocational education

COLLEGE-BOUND STUDENTS

Students planning to enter college after graduation must take into consideration several factors. There are many more students enrolling in colleges now and space in these colleges is somewhat limited. It is necessary for students to apply for admission early in the fall of their senior year.

Most of the colleges in Illinois require the American College Test Examination (ACT) or Scholastic Aptitude Test (SAT) as part of the requirement for admission. These tests are administered by an independent organizations numerous times during the year. It must be taken as a junior in order to qualify for scholarship programs in Illinois.

Some of the private colleges require the Scholastic Aptitude Test (SAT) for admission. This test is administered by an independent testing organization and is given six times during the year.

College entrance requirements vary from school to school. Recent congressional mandates for admission to state universities are four years of English; three years of math including Algebra I, Geometry, and Algebra II; three years of lab science (Ag Science is not considered a lab science); three years of social studies; and two years of foreign language, music or art. Some schools require two years of foreign language. It is best to decide upon a school early and learn immediately the specific requirements of that school. Many colleges (especially the state schools) will not accept any student who does not rank in the upper half of his/her class. Test scores and rank in class are the two most important criteria for college admission.

2017-2018 UNITED HIGH SCHOOL COURSE OFFERINGS

<u>Dept.</u>	<u>Course</u>	<u>Unit of Credit</u>	<u>Recommended for</u>
<u>AGRICULTURE:</u>			
	Intro to Agriculture Industry	1	freshman-sophomore
	Ag Science	1	sophomore-senior
	**Ag Mechanization & Tech	1	sophomore-senior
	**Ag Construction	1	sophomore-senior
	**Ag Business Mgt	1	sophomore-senior
	**Ag Environmental Science	1	sophomore-senior
	Ag Leadership & Pers. Dev.	1	senior
 <u>ART:</u>			
	Art I	1	freshman
	Art II	1	sophomore
	Art III	1	junior
	Art IV	1	senior
 <u>BUSINESS:</u>			
	Computer Applications	1	freshman-senior
	Computer Programming	1	sophomore-senior
	Accounting I	1	junior, senior
	Accounting II	1	senior
	Journalism/Yearbook I, II	1	junior, senior
	+Consumer Economics	½	senior
 <u>ENGLISH:</u>			
	English 1	1	freshman
	FNDNS of Eng. 1	1	freshman (teacher recommendation only)
	English 2	1	sophomore
	FNDNS of Eng. 2	1	sophomore (teacher recommendation only)
	English 3	1	junior
	FNDNS of Eng. 3	1	junior (teacher recommendation only)
	FNDNS of Eng. 4	1	senior (teacher recommendation only)
	Applied English	1	junior, senior
	+Public Speaking	½	junior, senior
	+Mass Media	½	junior, senior
	Journalism/Yearbook	1	junior, senior
	+American Literature	½	junior, senior
	+Senior Composition	½	senior
	AP English	1	senior

* May be taken for one semester

**offered alternating years

+ One semester course

<u>Dept.</u>	<u>Course</u>	<u>Unit of Credit</u>	<u>Recommended for</u>
<u>FOREIGN LANGUAGE:</u>			
	Spanish I	1	freshman
	Spanish II	1	sophomore
	Spanish III	1	junior
	Spanish IV	1	senior
<u>HEALTH/DRIVER ED/PHYS. ED:</u>			
	+Driver Education (by birth date)	½	freshman, sophomore
	+Health Education	½	freshman, sophomore
	*Physical Education	1	freshman-senior
<u>INDUSTRIAL ARTS:</u>			
	Introduction to Technology	1	freshman-senior
	Drafting	1	sophomore-senior
	Woodworking	1	sophomore-senior
	Construction	2	junior, senior
<u>MATHEMATICS:</u>			
	Pre-Algebra	1	freshman, sophomore
	Algebra I	1	freshman, sophomore
	Informal Geometry	1	sophomore-senior
	Geometry	1	sophomore-senior
	Algebra II	1	sophomore- senior
	FNDNS of Algebra II	1	junior, senior
	Pre-Calculus	1	junior, senior
	AP Calculus	1	senior
	+Senior Math	½	senior
	+Consumer Math	½	senior
<u>MUSIC:</u>			
	Band	½	freshman-senior
	Chorus	½	freshman-senior
<u>SCIENCE:</u>			
	Biology I	1	freshman, sophomore
	FNDNS of Biology	1	freshman, sophomore
	Biology II	1	sophomore-senior
	Chemistry I	1	sophomore- senior
	Chemistry II	1	junior, senior
	Engineering Concepts and Practices	½	junior, senior
	Human Anatomy and Physiology	½	junior, senior
	Our Dynamic Universe	1	freshman- senior
	Physical Science	1	freshman-senior
	Physics	1	junior, senior
<u>SOCIAL STUDIES:</u>			
	+Civic	½	freshman
	+Government	½	freshman

World History	1	sophomore-senior
+United States History I, II, III, IV	½	sophomore- senior
+Economics	½	junior, senior
+Cultural History	½	sophomore-senior
+American Literature and Film	½	sophomore-senior
AP History	1	senior
*May be taken for one semester	**offered alternating years	+One semester course

AGRICULTURE BUSINESS AND MANAGEMENT

Introduction to the Agriculture Industry -18001A001: This orientation course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agriculture field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, agricultural mechanics, agricultural biotechnology, food science technology, environmental science and aqua-cultural science and technology will be presented. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. For those who are interested in shop work, you will have the opportunity to work with a variety of interesting woodworking and welding projects. Each year we go on a field trip to a farm show whether it is the Farm Progress Show or the Peoria Farm Show. In addition, we have a fine FFA program which allows you to work and meet many people in the surrounding area as well as all over the state. We participate in many contests such as livestock evaluation, agricultural mechanics, public speaking, and parliamentary procedure to name a few. Our agriculture program has something of interest for everyone as new jobs are opening up in biotechnology, marketing, and computers. One out of four jobs nationally requires agricultural skills, so this class is a very important class for you to take. For those who are interested in college, our program is a basic background to the community colleges and 4-year colleges, and will provide you with classes you will need for an agricultural career.

Level 9-10

Elective 2 Sem.

Credit 1

Agriculture Science- 18003A001: This orientation course builds on basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Successful completion of this course will fulfill a credit of science which is needed for graduation. Major units of instruction include agricultural research, soil science, advanced plant science, biotechnology, and advanced animal science. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Level: 10-12

Elective: 2 Sem.

Credit 1

Agricultural Mechanics and Technology- 18402A001: This course will concentrate on expanding a student's knowledge and experiences agricultural mechanics technologies utilized in the agricultural industry. Units of instruction included are: design, construction, fabrication, maintenance, welding, electricity/electronics, internal combustion engines, hydraulics, and employability skills. Careers of agricultural construction engineer, electrician, plumber, welder, equipment designer, parts manager, safety inspector, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career development and reinforcement of academic concepts.

Level: 10-11-12

Elective: 2 Sem. **Alternating Years**

Credit 1

Agricultural Construction and Technology- 18403A001: This advanced course focuses on the knowledge, hands-on skills, and workplace skills applicable to construction in the agricultural industry. Major units of instruction include: personal safety, hand tools, power tools, blueprint reading, surveying, construction skills in carpentry, plumbing, electricity, concrete, block laying, drywall and painting. Careers such as agricultural engineers, carpenter, plumber, electrician, concrete and block layers, finishers, safety specialists, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised

Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Level: 10-11-12

Elective: 2 Sem. **Alternating Years**

Credit 1

Agricultural Business Management- 18201A001: This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and/or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state and federal taxes, sales and marketing, economic principles, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Level: 10-11-12

Elective: 2 Sem. **Alternating Years**

Credit 1

Agricultural Environmental Science- 18504A001: Ag Environmental Science is a year-long course involving the natural resource applications and environmental impact of agricultural and its interrelatedness with the environment. Hunting regulations, soil conservation, wildlife, and ecosystem sustainability are major topics of emphasis.

Level: 10-11-12

Elective: 2 Sem. **Alternating Years**

Credit 1

Agricultural Leadership and Personal Development (ALPD) -18203A000: This course is designed to provide students with the knowledge and leadership experiences to help them to become successful in life and in the workplace. Students will further enhance their potential for leadership development, personal growth, and career success. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Level: 12

Elective: 2 Sem.

Credit 1

ART

Art I- 05155A000: This 2 semester course includes opportunities to learn basic skills in drawing, design, painting, sculpture, and ceramics. The course focuses on the Elements of Design, artists and art history from Realism, to Pop Art, to Modernism and more. This course will expose students to researching artists, art history, artworks, and compositions. Opportunities to display artwork in art shows are available through this course. Art I is a prerequisite for Art II and a C average must be maintained in order to take Art II.

Level: 9-12

Elective: 2 Sem.

Credit 1

Art II- 05155A000 : This two semester course provides more opportunities to work in the following areas: drawing, painting, sculpture, and ceramics, with a focus on the Principles of Design. Students will have the opportunity to participate in critiques, art shows, and create artist statements. Students are encouraged to delve deeper into themselves as an artist and begin developing their own art style. Art II is a prerequisite for Art III and Art IV and a C average must be maintained in order to enroll in those classes.

Level: 10-12

Elective: 2 Sem.

Prerequisite Art I

Credit 1

Art III – IV- 05155A000: 1 Credit each. This 2 semester course allows the student to work independently in their style

using 2D or 3D mediums of their choice. A minimum of 3 projects is required per quarter. Students will be required to write an artist statement and participate in an art show. All 2D projects must be 12×18 inches or larger in order to be considered a final project. Exposure to college and career possibilities available to those with an interest will be encouraged.

Level 11-12 Elective: 2 Sem. Prerequisite Art II Credit 1

BUSINESS

Computer Applications- 10004A001: This course is an introduction to the Microsoft Office suites of Word, Excel, Access, PowerPoint, and Publisher. It is intended to give students an overview of basic computer systems, word processing, spreadsheets, databases, visual presentations, and desktop publishing applications. Emphasis is placed on using Microsoft in relevant home, school, and work situations.

Level: 9-12 Elective: 2 Sem. Credit 1

Computer Programming- 10152A000: This course provides students with a solid foundation in programming, using the BASIC and HTML programming languages. Students are taught to use HTML related to forms, tables and frames for use in writing web pages. Students are taught programming commands in BASIC to prepare documents using strings, arrays, graphics, sequential data files and random data files. Students taking this course should be very comfortable with Algebraic concepts. Programming languages require reasoning and problem solving skills. They also require the use of logical and relational operators to create clear, effective and efficient computer programs.

Level:10-11-12 Elective 2 Sem. **Prerequisite Algebra I** Credit 1

Accounting I- 12104A001: This first-year accounting class will give students a thorough background in the basic accounting principles. Students will work through the steps of the accounting cycle with the emphasis on journaling accounting transactions, posting to the ledgers and preparing financial statements. Computer accounting simulations will also be incorporated into the course.

Level 11-12 Elective: 2 Sem. Credit 1

Accounting II- 12104A002: This advanced accounting class expands on topics learned in the Accounting I class while adding new topics related to departmentalized accounting, voucher systems, inventory, uncollectible accounts, plant assets, notes payable, and notes receivable. Computer accounting simulations will also be incorporated into the course.

Level 12 Elective: 2 Sem. **Prerequisite Accounting I** Credit 1

Journalism//Yearbook I, II- 11104A000: This challenging course is designed to teach the techniques of story development, newspaper and yearbook copy writing, ad marketing, sales, layout, graphic design, photography, and interviewing. Students will be responsible for the production of the monthly online school newspaper, *The Storm Tracker*, and the annual school yearbook, *Impressions*. Students will be expected to devote a substantial amount of out-of-class time taking photos and acting as reporters at school sporting events, meetings, and activities.

Level: 11-12 Elective: 2 Sem. **Prerequisite Approval of Teacher(s), English 3, and a B or higher in English** Credit 1

Consumer Economics- 22210A000: This required course has the goal of helping students to become financially literate and fiscally responsible. Areas to be covered include: budgeting, comparison shopping, savings, investments, insurance,

federal consumer protection, consumer rights, checking/debit cards, consumer fraud, credit and mortgages.

Level: 10-12

Required: 1 Sem.

Credit ½

ENGLISH

English 1- 01001A000: English 1 is the first course in the college-preparatory English sequence. This course is reading, writing, and technology intensive: significant time is spent on vocabulary development and grammar review particularly in the context of student writing. Students are introduced to elements of the Modern Language Association (MLA) Formatting and Style Guide.

Level: 9

Required: 2 Sem.

Credit 1

FNDNS of English 1- 0101A000: English 1 is the first course in the college-preparatory English sequence. This course is reading, writing, and technology intensive: significant time is spent on vocabulary development and grammar review particularly in the context of student writing. Students are introduced to elements of the Modern Language Association (MLA) Formatting and Style Guide.

Level: 9

Required: 2 Sem. (By teacher recommendation only)

Credit 1

English 2- 01002A000: English 2 is the second course in the college-preparatory English sequence, building on English 1. This course is reading, writing, and technology intensive; significant time is spent on vocabulary development and grammar review, particularly in the context of student writing. Students review and use the Modern Language Association (MLA) Formatting and Style Guide

Level: 10

Required: 2 Sem. **Prerequisite English 1**

Credit 1

FNDNS of English 2- 01002A000: English 2 is the second course in the college-preparatory English sequence, building on English 1. This course is reading, writing, and technology intensive; significant time is spent on vocabulary development and grammar review, particularly in the context of student writing. Students review and use the Modern Language Association (MLA) Formatting and Style Guide

Level: 10

Required: 2 Sem. Prerequisite English 1 (By teacher recommendation only)

Credit 1

English 3- 01003A000: English 3 is the third course in the college-preparatory sequence. This course is reading, writing, and technology intensive. Vocabulary acquisition and use, grammatical proficiency, and higher order critical thinking skills are emphasized, particularly in the context of student writing. Students use the Modern Language Association (MLA) Formatting and Style Guide to publish their writing.

Level: 11

Required: 2 Sem. **Prerequisite English 1 and 2**

Credit 1

FNDNS of English 3- 01003A000: English 3 is the third course in the college-preparatory sequence. This course is reading, writing, and technology intensive. Vocabulary acquisition and use, grammatical proficiency, and higher order critical thinking skills are emphasized, particularly in the context of student writing. Students use the Modern Language Association (MLA) Formatting and Style Guide to publish their writing.

Level: 11

Required: 2 Sem. **Prerequisite: English 1 and 2** (By teacher recommendation only)

Credit 1

FNDNS of English 4- 01004A000: This course is reading, writing, and technology intensive. Vocabulary acquisition and use, grammatical proficiency, and higher order critical thinking skills are emphasized, particularly in the context of student writing. Students use the Modern Language Association (MLA) Formatting and Style Guide to publish their writing.

Level: 11

Required: 2 Sem. **Prerequisite: English 1, 2,3** (By teacher recommendation only)

Credit 1

Applied English- 01156A000: This year-long course teaches students “real world” skills involving reading, writing, listening, and speaking. The content will focus on practical applications of these skills to assist students preparing for the workplace and other post-high school environments. Assessments include the design and use of business letters, resumes, interview preparation, email etiquette, etc. The purpose of the course is to provide students with a baseline of practical English and communication tools for success, rather than emphasize language arts skills as applied to scholarly and literary materials.

Level- 11-12 Elective: 2 Sem. **Prerequisite: English 1 and 2 (or FNDNDS 1 and 2). Must have either passed or be currently enrolled in English 3 (or FNDNDS of English 3).** Credit: 1

Public Speaking- 01151A000: This is a performance course in public speaking. The principles of oral public communication will be presented through readings and lecture. The student will apply these principles in the speeches presented to the class. Emphasis will be placed on the discovery and organization of important ideas and the communication of those ideas to a specific audience. Research techniques, structured writing, and adherence to grammatical principles will be strongly emphasized.

Level: 11-12 Elective: 1 Sem. **Prerequisite: 2 years of English and must be enrolled in or completed English 3**

Mass Media- 11001A000: This course introduces the student to the functions of mass media with the emphasis on the recognition of the historical development of mass communications and the role mass media play in a society's development. Underlying the course is the ideal of the dedication of the news media and the responsibility of the journalist to the public interest.

Level: 11-12 Elective: 1 Sem. **Prerequisite: 2 years of English and must be enrolled in or completed English 3**

Journalism//Yearbook I, II- 11101A000: This challenging course is designed to teach the basics of story development, newspaper and yearbook copy writing, ad marketing, sales, layout, graphic design, photography, and interviewing. Students will be responsible for the production of the monthly online school newspaper, *The Storm Tracker*, and the annual school yearbook, *Impressions*. Students will be expected to devote a substantial amount of out-of-class time taking photos and acting as reporters at school sporting events, meetings, and activities.

Level: 11-12 Elective: 2 Sem. **Prerequisite Approval of Teacher(s), English 3, and a B or higher in English** Credit 1

American Literature- 01054A000 : This course focuses upon the great literary works of American authors from the beginning through the 20th century. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses, and written compositions are often required. This class carries a weighted grade and is taught in the manner of a college level course where comprehensive, objective examinations provide the basis for evaluation.

Level 11-12 Elective: 1 Sem. Credit 1/2

Senior Composition- 01102A000: Emphasis is on critical reading, organization, logical thought, paragraphing, development, sentence structure, grammar and punctuation. Also studied will be argumentation and inductive/deductive reasoning. Student use the Modern Language Association (MLA) Formatting and Style Guide as well as the American Psychological Association (APA) Style Guide for the production of the required research papers.

Level: 12 Elective 1 Sem. **Prerequisite English 3** Credit 1/2

Advanced Placement (AP) English Literature and Composition- 01006A000: This rigorous one-year course engages students in the careful reading and critical analysis of imaginative literature (novels, short stories, poetry, and drama). The

course is reading and writing intensive, and it culminates in a three-hour international exam administered each spring. Individual test score and institutional policy determine eligibility for university credit.

Level: 12

Elective: 2 Sem. **Prerequisite: English 1, 2, and 3**

Credit 1

FOREIGN LANGUAGE

The primary reason that Spanish is offered at United is the tremendous prevalence of other cultures within our global society. The study of Spanish, however, offers more than just the opportunity to learn to speak the language. The study of the language also opens doors for better understanding of the people and their respective cultures from the Spanish-speaking world. Learning a world language helps to develop and strengthen the four essential skills of listening, speaking, reading and writing.

Spanish I- 06101A000: This introductory course is designed for students with little or no previous study of Spanish. This course teaches basic language patterns and useful, real life vocabulary. Culture is an integral part of the course and is introduced through the use of media, demonstrations and class discussions. Cultural focus is on Spanish in the United States, Mexico and the Caribbean. In addition, to written tests and quizzes, students may also be assessed by means of aural and oral activities.

Level: 9-12

Elective: 2 Sem.

Credit 1

Spanish II- 06102A000: This course builds upon the foundational content developed in Spanish 1. Vocabulary and grammatical aspects expand to new categories of real life applications and understanding. The contemporary, cultural focus turns to those Spanish-speaking countries in South America.

Prerequisite: Successful completion of Spanish 1 with a grade of C or higher OR prior approval from the Spanish Teacher.

Level: 10-12

Elective: 2 Sem.

Credit 1

Spanish III- 06103A000: This upper-level course has been developed to help students further grow their language acquisition in Spanish through the study of language structures in cultural and historical contexts. Students will be engaged in an expanded study of language structures and vocabulary through reading, listening, speaking, and writing activities. Aspects of contemporary culture will focus on the diverse country of Spain. This course culminates with the reading of a novel in the target language.

Prerequisite: Successful completion of Spanish II with a grade of C or higher OR prior approval from the Spanish Teacher

Level: 11-12

Elective: 2 Sem.

Credit 1

Spanish IV- 06104A000: This upper-level course provides students the opportunity to further develop, improve and refine their listening, speaking reading, and writing skills. Emphasis continues to be placed on aural skills with additional emphasis on reading and writing in the target language. Students experience multiple opportunities to demonstrate their proficiency in Spanish in different contexts. Additional aspects of contemporary culture from the entire Spanish-speaking world are emphasized through cultural readings, media, and class discussions. This course culminates with the reading of a novel from Spain in the target language.

Prerequisite: Successful completion of Spanish III with a grade of C or higher OR prior approval from the Spanish Teacher.

Level: 12

Elective: 2 Sem.

Credit: 1

HEALTH/DRIVER ED/PHYS. ED

Driver Education- 08152A000: Illinois law states that a person must be 18 years of age to obtain an Illinois driver's license unless they have successfully passed both classroom and behind-the-wheel material. Behind-the-wheel allows the student to have a minimum of six hours of driving and classroom provides for a minimum of thirty hours of classroom study. **(Students may have to drive after school to fulfill their 6 hour driving requirement.)**

Students must drive with parent or another responsible adult for 50 hours and 10 of those hours must be at night.

Once the student receives their white slip, they have a 9 month practice period. The instructor and parent work simultaneously during that time period to teach necessary driving skills. Students may not obtain their license until that 9 month period is over, in some cases the student will pass their 16th birthday while in the practice period.

A school fee and a separate Secretary of State fee are required to participate in the driving portion of the driver education course.

Students may take the class without participating in the driving portion if they wish to avoid the fee for driving expenses.

Upon passage of these requirements, students will be eligible to receive their license through the Secretary of State.

Each student attending any public...school in the district must receive a passing grade in at least 8 courses during the previous 2 semesters prior to enrolling in the driver education course, or the student shall not be permitted to enroll in the course...(105 ILCS 5/27-24.2)

Level: 9-10 Elective: 1 Sem. **Prerequisite: PASS 8 CLASSES in previous 2 years.** Credit ½

Health Education- 08051A000: This one semester course is designed to meet state requirements for the teaching of health. Emphasis will be given to such topics as wellness, holistic health, decision making skills, nutrition, physical development, mental health, alcohol, tobacco and drug use and abuse, human reproduction and development, personal health, and first aid.

Level: 10 Elective: 1 Sem. Credit ½

Physical Education- 08001A000: Physical education provides experiences in team, individual and dual sports and dance with the purpose of developing the student physically, mentally, socially, emotionally, and morally. Emphasis is placed on physical development, sportsmanship, healthful living and lifetime recreational activities. Students learn the fundamentals and skills of all games played. Those activities which are non-contact and suited for both boys and girls are coeducational. Student participation in all activities is required unless excused by written permission of a physician. Course may be taken every year.

Level: 9-12 Elective: 2 Sem. Credit 1

INDUSTRIAL ARTS

Introduction to Technology- 21052A001: This course provides a basic introduction to the following fields; drafting, communications, transportation, problem solving, alternate energy sources and woodworking with hand tools.

Level: 9-12 Elective: 2 Sem. Credit 1

Drafting/Graphic Design and Production- 21102A001: This course acquaints the student with the application of drafting in every day life. Students learn how to design, draw, plan and use drawings as used by industry and in life's activities. It will include care and use of drawing equipment, lettering, orthographic projection, auxiliary views, sectional views, and pictorial projections. It will include the drawing of mechanical drawings, architectural drawings, technical illustrations and electrical drawings. These skills will be taught with the use of the computer and the CAD drawing software. During this course students will also operate United X-treme screens, the Industrial Technology Department's screen printing business. Business operation involves creating t-shirt designs and other artwork, set up of silk screens, production of t-shirts and management of business income and expenses. Students enrolled in Drafting/Graphic Design and Production will also participate in Bridge-Pal competition at Bradley University.

Level: 10-12 Elective: 2 Sem. Credit 1

Woods (Woodworking)- 17007A001: The learning activities included in this course are basic woodworking techniques,

machine use and safety, use of hand tools, wood identification, and finishing. A lab fee for materials is charged.

Level: 10-12 Elective: 2 Sem. **Prerequisite: Introduction to Technology** Credit 1

Construction- 17002A001: Construction is designed as a hands-on-learning course. The student will participate in the building of a project designed to last the school year. They will design, order materials, and construct the project using modern techniques. Skills that are learned in Introduction to Technology and Woodworking will be applied throughout this course.

Level: 11-12 Elective: 2 Sem. **Prerequisite: Introduction to Technology and Woodworking
2 Hour Course** Credit 2

MATHEMATICS

Pre-Algebra- 02051A000: Pre-Algebra will introduce algebraic concepts such as variables, linear equations and graphing on the coordinate plane and will review such concepts as proportions, percentages, and fractions. The course will prepare students for algebra but is not a prerequisite for algebra.

Level: 9 2 Sem. Teacher recommendation only Credit 1

Algebra I- 02052A000: Algebra I is the first course of higher mathematics. The course begins with an introduction to the literal number (a number represented by a letter), fundamental laws, and operations of arithmetic. The set of numbers is then expanded to permit solutions of equations and inequalities. The course ends with an introduction to some elementary trigonometry. Any student interested in business, science, engineering, architecture, or a college education will need this course. Most colleges require at least one year of algebra.

Level: 9 Required: 2 Sem. Credit 1

Informal Geometry- 02071A000: Informal Geometry is the study of figures in a plane and in space without the demands of formal proof. The topics studied include points, lines, planes, angles, triangles and other polygons, circles, solids, some logic and constructions. Informal Geometry is specifically designed for students who have had some difficulty in Algebra 1 or who have progressed through an Algebra 1 curriculum. **(Geometry, not Informal Geometry, is recommended for college bound students. Many colleges won't include Informal Geometry toward college admission or program admission requirements.)** Students take either Informal Geometry or Geometry but not both.

Level: 10-11 2 Sem. **Prerequisite: Algebra 1** Credit 1

Geometry- 02072A000: Geometry is the second course in the study of higher mathematics. Geometry is the study of figures in a plane and in space. This course is comprised of properties and characteristics of plane geometric figures, applications of geometry in everyday situations, integrations of geometry & algebra skills, and proofs. The student is taught the steps of logical reasoning through the use of the triangle, square, rectangle, circle, parallelogram, and many other figures. The key points of solid geometry are introduced. Reasoning is the prime importance of this subject. Many colleges require geometry as well as algebra for admission.

Level: 10-12 Required: 2 Sem. **Prerequisite: Algebra I** Credit 1

Algebra II- 02056A000: Algebra II is a continuation of Algebra I. It delves deeper into the solution of linear equations, systems of equations, quadratic equations, radicals, verbal problems, ratio and proportion, variations, and trigonometry. The student is also introduced to complex numbers, sequences and series, and rates of change which is a very elementary introduction to calculus. This course is designed for students that are very comfortable with Algebra I concepts and considering Pre-Calculus.

Level: 10-12 Required: 2 Sem. **Prerequisite: Geometry** Credit 1

FNDNS of Algebra II- 02056A000: Designed for a student that need additional help with Algebra I concepts and would benefit from a slower pace than Algebra II.

Level: 10-12 2 Sem. **Prerequisite: Geometry or Informal Geometry** Credit 1

Consumer Math- 02157A000: This course is designed to provide students with a range of topics based on financial literacy. Most material will be presented in a project based form. Topics that will be taught will include but are not limited to: maximizing profit, area/volume, purchases (auto and home), taxes, insurance, savings, debt, and budgeting.

Level: 12 1 Sem. **Prerequisite: 3 years of Math** Credit 1/2

Senior Math- 02993A000: This course will provide students with skills and strategies associated with standardized test taking (COMPASS, ACT, SAT, etc.) Topics included will be strategies for algebra, geometry, trigonometry, word problems, and time management. The usage of a graphing calculator will also be taught but a graphing calculator is not required for this class.

Level: 12 1 Sem. **Prerequisite: 3 years of math including Algebra 2 Or FNDNS of Alg. 2** Credit 1/2

Pre-Calculus- 02110A000: This is a college preparatory course in mathematics. Those students not planning a college education, but desirous of more mathematical training, will find this to be an excellent terminal course. The content of this course is a more rigorous study of the concepts introduced in the previous mathematics courses. Key topics to be investigated are: real and complex numbers, functions, trigonometry, analytical geometry, mathematical induction, mathematical structures, vectors, derivatives and integrals.

Level: 11-12 Elective: 2 Sem. **Prerequisite: Algebra II** Credit 1

AP Calculus – AB- 02124A000: This course includes derivatives and integrals of function, of products & quotients, composite and implicit functions and applications of derivatives & integrals. Limits & continuity, evaluating definite integrals and integration by substitution and parts are also covered with graphing, numerical, analytical and verbal/written communication emphasized.

Level 12 Elective: 2 Sem. **Prerequisite: Pre-Calculus & Teacher Recommendation** Credit 1

MUSIC

Band- 05101A000: Concert Band is offered to all students with previous experience on a traditional band instrument. Beginning students are welcome with permission of the instructor. This course will provide a large ensemble setting for students who wish to continue to develop both their own instrumental skill and that of an ensemble member. Students will continue to examine progressively more complex aspects of music literacy and music notation, with emphasis on performing with musical artistry and expression as members of an ensemble. Students will use critical thinking skills to examine and describe musical pieces. Students will gain further understandings related to the relationships between music, the other arts disciplines, and the other academic disciplines. Students will also be challenged to understand music in relationship to the history and culture of our 21st Century society, preparing them to interact with today's ever changing global society from a different view than traditional subjects.

In addition to concert Band, students participate in marching band activities for home football games, pep band for select home basketball games, and Memorial Day ceremonies. Student involvement in concert and performance activities will be part of the grading process for this course. A required, marching band camp will be held in August. Students may choose to participate in or audition for events such as the Lincoln Trail Conference Festival Band, ILMEA Honors Band, jazz band, chamber ensembles, and solo and ensemble contest.

Level: 9-12 Elective: 2 Sem. Credit ½

Chorus- 05110A000: This is a year-long course that explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. Students in chorus are expected to participate in three concerts during the school year, as

well as the Lincoln Trail Conference Choral Festival in the fall.

Level: 9-12

Elective: 2 Sem.

Credit ½

SCIENCE

Biology I- 03051A000 : Biology is the study of living things. Emphasis is given to general biological principles and concepts. This is a first year, introductory course about the natural world including the following topics: structure and function of living things, matter and energy in organisms and ecosystems, relationships in ecosystems, genetics, natural selection, and evolution. The course includes labs, activities, and projects.

Level: 9-10

Required: 2 Sem.

Credit 1

FNDNS of Biology- 03051A000: Foundations of Biology will cover the same topics as Biology with more teacher involvement.

Level: 9-10

Required: 2 Sem. (By teacher recommendation)

Credit 1

Biology II- 03052A000 : Biology II is an outgrowth of Biology I and is intended for the self-motivated student who is interested in continuing their study of life science. Students who are interested in a career in science (nursing, agriculture, physical therapy, dentistry, pharmacy and others) will benefit from this class. Topics include biochemistry, ecology, histology (study of tissues), microbiology, anatomy, physiology, and environmental science. The course includes labs, activities, and projects.

Level: 10-12

Elective: 2 Sem. **Prerequisite: Biology 1**

Credit 1

Chemistry I- 03101A000: Chemistry I is designed as a rigorous academic course for those who plan to go on to college or pursue technical or professional programs, such as nursing, agriculture, pharmacy, chemistry, or engineering. Chemistry is the study of substances and with the changes they undergo. These topics include: scientific measurement, atomic structure, periodic trends, chemical bonding, dimensional analysis, chemical equations and reactions, energy and phases, gas laws, acids and bases, radioactive decay, equilibrium, and reaction rates. Laboratory work is an essential part of the class to illustrate these chemistry topics. Students will need a scientific calculator.

Level: 10-12

Elective: 2 Sem. **Prerequisite: A grade of "C" or better in Algebra-Geometry**

Credit 1

Chemistry II- 03102A000: Chemistry II is designed to be an advanced rigorous academic class for those students planning on going to college or pursuing technical or professional programs, such as nursing, agriculture, pharmacy, chemistry, or engineering. Students will have a quick review of their first chemistry class, both independently and in class. The class will then consist of an in-depth look at new topics such as thermodynamics, electrochemistry, oxidation-reduction, organic chemistry, and nuclear chemistry. Laboratory work is an essential part of class to illustrate these chemistry topics. Students will need a scientific calculator.

Level 11-12

Elective: 2 Sem. **Prerequisite: Chemistry 1, Algebra 1, Geometry**

Credit 1

Engineering Concepts and Practices- 21005A000: *Engineering Concepts and Practices* is an engineering research course in which students work in teams to research, design, test, and construct a solution to an open-ended engineering problem. The product development life cycle and a design process are used to guide the team to reach a solution to the problem. The team presents and defends their solution to a panel of outside reviewers at the conclusion of the course. This course allows students to apply all the skills and knowledge learned in previous science and math courses. The use of 3D models helps students design solutions to the problem their team has chosen. This course also engages students in critical thinking and problem-solving, time management and collaboration; a valuable set for students' future careers.

Level: 11-12

Elective: 1 Sem. **Prerequisite: Geometry, Algebra, Physical Science/ Chemistry**

Credit 1/2

Human Anatomy and Physiology- 03053A000: This course provides students with a study of the structure and function of the human body. The study begins at the cellular level and proceeds through selected organ systems. This course has a laboratory section that includes experimentation and dissection. Students are expected to dissect. The

course is appropriate for students intent on a four year program as well as those seeking training in sport and/or medical and healthcare fields.

Level: 11-12 Elective: 1 Sem. **Prerequisite: Biology** Credit ½

Our Dynamic Universe- 03008A000: This course has been designed to allow students the opportunity to develop an understanding of a wide range of topics in Earth and Space Sciences. The topics include *space systems, History of the Earth, Earth's Systems, Weather and Climate, and Human Sustainability.*

Level: 9-12 Elective: 2 Sem. Credit: 1

Physical Science- 03159A000: Physical Science is a course that includes Chemistry and Physics. Chemistry units will cover the study of the structure and properties of matter, modern atomic theory, matter and reaction processes and energy transfer. Physics units investigate force, work, velocities, simple machines, speed, accelerations, electricity and energy conversions, waves and electromagnetism.

Level: 9-10 Elective: 2 Sem. Credit 1

Physics- 03151A000: Physics is a study of matter and energy and the interchange of potential and kinetic energy among material objects. The first semester is devoted to mastering topics such as mechanics and sound. The majority of the semester will be focused on mechanics and force: Newton's Laws of Motion. The second semester will move past mechanics and sound to focus on light, electricity and magnetism; main topics including optics, diffraction grating, and sound waves. Time permitting students will be introduced to quantum physics dealing with photo electricity, radioactivity, atomic structure, nuclear fission, and the interaction of radiation and matter. A portion of both semesters will be dedicated to laboratory time to reinforce concepts introduced during lecture, the primary method of instruction.

Level: 11-12 Elective: 2 Sem. **Prerequisite: Algebra-Geometry- Physical Science/Chemistry** Credit 1

SOCIAL STUDIES

Civics- 04161A000 and Government 04151A000: This course emphasizes the study of American political behavior at the federal, state, and local levels of government. This course also examines the parties' issues, candidates and special interest groups and their roles in American politics. Contemporary social problems (IE.: gun violence and Second Amendment rights, freedom of expression, abortion and Roe v. Wade, capital punishment, etc.) will be examined. Individual responsibility and a citizen's role in a democracy will be emphasized.

Level: 9 Required for graduation: 1 Sem. Of Civics Credit ½
Elective: 1 Sem. Of Government Credit ½

World History- 04051A000: The major objective in world history is a study of the past to obtain a better understanding of the present in order to make better preparations for the future. These courses are panoramic in scope, extending from the major prehistoric cultures to the present. Aspects of military history, achievements in science, industry, technology, and religion are also studied with the primary emphasis on Western civilization.

Level: 10-12 Elective: 2 Sem. Credit 1

United States History (see codes below): The basic purpose of students learning U.S. history is not only for them to learn what they need to know about their own country, but to discover how the present comes from the past with encouragement for the student to see how the future will come from the present. Therefore, current events are important in the study of

