

# 2020-2021

## WILMINGTON HIGH SCHOOL GRADUATION REQUIREMENTS

<b>ENGLISH</b>	8 semesters / 4 yrs (enrollment required each semester)
<b>MATHEMATICS</b>	6 semesters / 3 yrs (enrollment required: 9, 10, 11 grades)
<b>SCIENCE</b>	4 semesters / 2 yrs
<b>SOCIAL SCIENCE</b>	1 semester of World Civilization / .5 yr 2 semesters of U.S. History / 1 yr 1 semester of Civics / .5 yr 1 semester of Consumer Economics / .5 yr
<b>PHYSICAL EDUCATION</b>	7 semesters / 3.5 yrs
<b>DRIVER'S EDUCATION</b>	1 semester / .5yr Classroom portion
<b>HEALTH</b>	1 semester / .5 yr
<b>COMPUTERS</b>	1 semester / .5 yr
<b>FINE ARTS</b>	4 semesters / 2 yrs (Music, Foreign Language, Art and Vocational courses)

### Must take State-Mandated SAT Assessment and Earn 28 Credits

### Weighted Courses

Honors Algebra II	Honors Biology
Honors Geometry	Honors Earth and Space Science
Honors Pre Calculus	Honors Chemistry I
Honors Calculus	Honors AP Chemistry
Honors AP Calculus	Honors Anatomy & Physiology
Honors English I, II, III	Honors AP Biology
Honors JJC English 101/102	Honors Physics
Honors Spanish III	Honors AP U.S. History
Honors Spanish IV	Honors JJC Political Science 101

### Recommended College Entry Coursework

<b>ENGLISH</b>	8 semesters / 4 yrs
<b>MATH</b>	6-8 semesters / 3-4 yrs
<b>SCIENCE</b>	6-8 semesters / 3-4 yrs
<b>SOCIAL SCIENCE</b>	6 semesters / 3 yrs
<b>FOREIGN LANGUAGE OR FINE ARTS</b>	4 semesters / 2 yrs

Most colleges will accept 4 semesters of Fine Arts for college entry; however, please note that at least one school (University of Illinois) requires 4 semesters of one foreign language for acceptance.

# WILMINGTON HIGH SCHOOL FOUR-YEAR EDUCATIONAL PLAN

Student Name \_\_\_\_\_

Career Goal \_\_\_\_\_

This page is provided as a guide for your educational planning. Please fill in your four-year plan on the lines for each year.

## FRESHMAN

English (1) \_\_\_\_\_  
Math (1) \_\_\_\_\_  
Science (1) \_\_\_\_\_  
World Civilization I or II (.5) \_\_\_\_\_  
Micro Office Proj (.5) \_\_\_\_\_  
Freshman Physical Ed (1) \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Total Credits (8): \_\_\_\_\_

## JUNIOR

English (1) \_\_\_\_\_  
Math (1) \_\_\_\_\_  
Science (1) \_\_\_\_\_  
U.S. History (1) \_\_\_\_\_  
Physical Education (1) \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Total Credits (8): \_\_\_\_\_

## SOPHOMORE

English (1) \_\_\_\_\_  
Math (1) \_\_\_\_\_  
Science (1) \_\_\_\_\_  
Driver Ed (.5) \_\_\_\_\_  
Health (.5) \_\_\_\_\_  
Physical Education (1) \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Total Credits (8): \_\_\_\_\_

## SENIOR

English (1) \_\_\_\_\_  
Math (1) \_\_\_\_\_  
Science (1) \_\_\_\_\_  
Civics (.5) \_\_\_\_\_  
Consumer Economics (.5) \_\_\_\_\_  
Physical Education (.5) \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Elective \_\_\_\_\_  
Total Credits (8): \_\_\_\_\_

### Career Resources

[www.onetonline.org](http://www.onetonline.org)

[www.stemjobs.com](http://www.stemjobs.com)

[www.bls.gov](http://www.bls.gov) under publications click on Occupational Outlook Handbook

**Electives** should be chosen based on your career goals. Taking a variety of electives can help determine your talents, interests, and decisions regarding your future.

**College-bound students** should plan to take 4 years of English, 3-4 years of math and science, 3 years of social studies, and 2 years of foreign language to be prepared to apply to the college of their choice after high school.

**School Counselors** are available to help students make decisions regarding high school course selection, the college application process and future career options. Contact the Guidance Office at (815) 926-1738.

**NAVIANCE:** is available to all students, offering college planning tools and Career assessments.

# MATHEMATICS

**NOTE: THERE ARE NOT ENOUGH CLASSROOM CALCULATORS FOR EACH STUDENT.**

## ALGEBRA I

Prerequisite: None  
Class Level: 9  
Credit: 2 (only one credit will apply toward the math credits needed for graduation)

The goals of this course are to expose the student to algebraic structure and to train the student in computational and manipulative skills. There will be a strong emphasis on: solving linear and quadratic equations, graphing functions, factoring, applying algebraic skills and connecting skills to real-world applications. This course is double-blocked, which means it meets on A and B days.

## ALGEBRA II

Prerequisite: Successful completion of Algebra I and teacher recommendation  
Class Level: 10, 11  
Credit: 1

Topics covered in this class are: writing and solving linear systems of equations, solving linear equations, factoring and solving quadratic equations, solving exponential equations, solving root equations, solving logarithmic equations, factoring and solving other polynomials, graphing quadratic and other polynomial equations, and writing, graphing and solving rational functions.

## HONORS ALGEBRA II

Prerequisite: Successful completion of Honors Geometry with a "C" or better  
Class Level: 10  
Credit: 1

This **weighted** course is the in-depth study of functions. This course will cover the following topics: piecewise functions, overview of function families (constant, linear, absolute value, quadratic), linear systems, quadratic equations and functions, polynomials and polynomial functions, radical functions and rational exponents, rational functions, and exponential and logarithmic functions. Sequences and Series will also be introduced.

## GEOMETRY

Prerequisite: Successful completion of Algebra I; sophomores must have a grade of at least an "A" each semester in Algebra I to enroll in Algebra II and Geometry concurrently  
Class Level: 9, 10, 11  
Credit: 1

This is a standard course in two and three-dimensional geometry. Some major topics covered are: segment and angle bisectors, parallel and perpendicular lines, similar and congruent triangles, polygons, right triangles and trigonometry. Circumference, area, and volume of geometric figures will also be introduced. This course is helpful for those considering further study in industrial and technical careers. It is recommended that students have a TI-30 x11s or comparable calculator.

## GEOMETRY IN CONSTRUCTION

Pre-requisite: Successful completion of Algebra I and teacher recommendation.  
Class Level: 10  
Credit: 1

Geometry in Construction is an interdisciplinary course that integrates Geometry and Construction topics through the building of a significant construction project. The purpose of this course is to provide students with a better understanding of both the Geometry and the Construction content through the combination of the academic and work-world contexts. The Geometry content matches that of the other Geometry courses taught in the Math Department, and prepares

students for the subsequent Algebra II courses. Students will be exposed to and gain hands-on experience in the following areas of Construction: safety, framing, HVAC, plumbing, roofing, windows, exterior doors, and siding. Additional emphasis is given to teamwork, problem-solving, and the promotion of STEM education.

## HONORS GEOMETRY

Prerequisite: Successful completion of Algebra I with a minimum of a "B" average and teacher recommendation; sophomores must have a grade of at least an "A" each semester in Algebra I to enroll in Algebra II and Geometry concurrently  
Class Level: 9, 10  
Credit: 1

This **weighted** course will provide an integrated study of the elements of plane, solid, and coordinate Geometry. Some major topics covered are: segment and angle bisectors, parallel and perpendicular lines, similar and congruent triangles, polygons, right triangles and trigonometry, and circles; as well, circumference, area, and volume of geometric figures will be studied. Techniques of reasoning and proof will be filtered into the topics throughout the course of the year. This course is necessary for those pursuing college studies and/or a career in a math-oriented field. It is recommended that students have a TI-30 xIIs or comparable calculator.

## PRECALCULUS

Prerequisite: Successful completion of Algebra II & Geometry and teacher recommendation  
Class Level: 11, 12  
Credit: 1

This course is designed to prepare students for college mathematics or science courses. Some major topics covered are algebraic review, polynomial functions, exponential and logarithmic functions, triangular Trigonometry, probability, analyzing functions and their graphs and matrices. The graphing calculator will play an important role in exploring and expanding mathematical concepts.

## HONORS PRECALCULUS

Prerequisite: Successful completion of Algebra II & Geometry with an "A" average or Honors Algebra II with a "B" average and teacher recommendation. It is recommended that the student take an honors math course before entering this class.  
Class Level: 11, 12  
Credit: 1

This **weighted** course is designed to prepare students for calculus and college mathematics or science courses. Some major topics covered are circular and triangular Trigonometry, polynomial and exponential functions, series, matrices, analytic trigonometry and geometry and vectors. The graphing calculator will play a role in exploring and expanding mathematical concepts.

## HONORS CALCULUS

Prerequisite: Successful completion of Honors Precalculus and teacher recommendation  
Class Level: 12  
Credit: 1

This **weighted** course is designed to prepare students for future college calculus courses. It covers topics such as: algebraic and transcendental functions, limits, the derivative and its applications, integration and applications of the definite integral, and the fundamental theorem of calculus.

## HONORS AP CALCULUS-Must have your own transportation

Prerequisite: Successful completion of Honors Precalculus with an A and teacher recommendation. You must score a 3 or above on The AP exam to receive credit, however each college decides which scores it will accept.  
Class Level: 12  
Credit: 1

This **weighted** course is structured to prepare students for the Advanced Placement Calculus AB Examination. Topics covered include algebraic and transcendental functions, the derivative, and its applications, chain rule, integration, the Fundamental Theorem of Calculus, the Mean Value Theorem, applications of the definite integral, and the differential equations. Students will be required to do an assignment during the summer before taking the class. This is a WEIGHTED grade course. A TI-83 or equivalent calculator is required.

### **INTERMEDIATE COLLEGE ALGEBRA- MATH 098**

Prerequisite: Successful completion of 3 prior math classes  
Class Level: 12  
Credit: 1

Topics include, but are not limited to: factoring, rational expressions, radicals, quadratics, and logarithmic and exponential functions. Students receiving a "C" or higher will place into a "credit" level course at JJC.

### **STATISTICS AND PROBABILITY**

Prerequisite: Successful completion of Algebra II and Geometry and teacher recommendation; Juniors must be concurrently enrolled in Precalculus.  
Class Level: 11, 12  
Credit: 1

Students will be introduced to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will also be exposed to four broad conceptual themes: 1. Exploring Data: Observing patterns and departures from patterns, 2. Planning a Study: Deciding what and how to measure, 3. Anticipating Patterns: Producing models using probability and simulation, 4. Statistical Inference: Confirming models.

### **ALGEBRA/GEOMETRY APPLICATIONS**

Prerequisite: Successful completion of Algebra I and teacher recommendation  
Class Level: 12  
Credit: 1

This is a project oriented course which will use basic algebraic skills in real-life applications. Students will develop higher-level thinking skills through sequential problem solving. Projects will incorporate a variety of technology and will require students to work independently and in cooperative groups. It also incorporates applications from various other areas including: health, science, drafting, family and consumer sciences, physical education, and building trades.

## **LANGUAGE ARTS**

### **HONORS ENGLISH I**

Prerequisite: Minimum of an "A" average in 8th grade Language Arts and 8th grade teacher recommendation  
Class Level: 9  
Credit: 1

This **weighted** course explores literary genres including short stories, novels, poetry, drama, and nonfiction. Students will briefly review active reading strategies, but this course is designed to employ these strategies immediately. Students will continue to review grammar and vocabulary on a daily basis, but an emphasis will be placed on advanced concepts. Students will refine their critical thinking and formal writing skills through a study of texts from the English I curriculum, as well as supplementary novels and plays. In addition to improving reading, speaking, listening, and research skills, this course is writing intensive, and students will be required to write on a bi-weekly basis.

### **ENGLISH I**

Prerequisite: None  
Class Level: 9  
Credit: 1

This course explores literary genres including: short stories, novels, poetry, drama and nonfiction. Through these genres, students will employ active reading strategies to help construct meaning from literary works. Students will practice

grammar and vocabulary on a daily basis. An emphasis will be placed on critical thinking skills and formal writing. Daily practice will also be devoted to improving: reading, writing, speaking, listening, library and research skills that will facilitate future coursework.

## HONORS ENGLISH II

Prerequisite: At least a "B" average in Honors English I with teacher recommendation or "A" average in English I with teacher recommendation  
Class Level: 10  
Credit: 1

This **weighted** course offers qualified students the opportunity to improve reading, writing, speaking, researching, and listening skills. Honors English II contains all independent reading and is very writing intensive. The reading areas will include: short stories, science-fiction, world literature, poetry, nonfiction, drama, and a Shakespearean play. Included in reading will be the analysis of literary devices, reading strategies, the in-depth interpretation of texts, and relation to modern society today. The writing process is strongly emphasized; types of writing will include: persuasive, narrative, expository, and creative writing. Students must complete a satisfactory research paper in order to pass this course. Grammar and proper writing technique are a strong focus throughout the semester.

## ENGLISH II

Prerequisite: English I  
Class Level: 10  
Credit: 1

This course will help students improve: reading, writing, speaking, researching, and listening skills. English II requires a variety of independent reading and writing assignments. The reading areas will include: short stories, science-fiction, world literature, nonfiction, poetry, and drama. Included in reading will be the analysis of literary devices, reading strategies, and the interpretation of texts. The writing process is strongly emphasized; types of writing will include: persuasive, narrative, creative, and expository. Students must complete a satisfactory research paper in order to pass this course. Grammar and proper writing technique are a strong focus throughout the semester.

## HONORS ENGLISH III

Prerequisite: "B" average in Honors English II or "A" average in English II, with teacher recommendation  
Class Level: 11  
Credit: 1

This **weighted** course focuses heavily on reading, writing, and thinking critically. Students will expand their knowledge of American Literature from pre-colonial through contemporary periods. Students will read a variety of materials: plays, poetry, short stories, novels, essays, sermons, etc., each representing the values and culture of various ethnic groups in America. This course will emphasize the importance of comprehension and application, as well as analyzing and thinking critically. Students will be asked to create compositions, including a literary analysis research paper. Students will also be asked to write essays in preparation for the SAT test.

## ENGLISH III

Prerequisite: English II  
Class Level: 11  
Credit: 1

This course expands students' understanding of American Literature from the colonial through contemporary periods. Students will read a variety of materials: plays, poetry, short stories, novels, essays, sermons, etc, each representing the values and culture of various ethnic groups in America. They will respond to that literature through written and oral expression with a focus on personal connections. Students will further develop their analytical skills through the writing of persuasive and expository essays and will also include essays in preparation for the ACT testing and Parcc Exam. The length requirement of each paper will be two to four pages. Students will also have a concentration in: vocabulary, grammar, reading skills, comprehension, application, and writing techniques. Some of the major works will include: *The Crucible*, *The Adventures of Huckleberry Finn*, *The Great Gatsby*, *12 Angry Men*, and *The Glass Menagerie*.

## **HONORS JJC ENGLISH 101 - RHETORIC**

Prerequisite: Must qualify with a minimum of 19 on the ACT, 480 or higher on SAT on ERW, or Accuplacer Next Generation Reading score of 246-300, Accuplacer WritePlacer score of 5-8.  
Class Level: 12  
Credit: .5 at WHS, 3 at JJC  
Cost: \$50-Will be credited to your JJC account if you enroll at JJC full time after graduation.

This **weighted** course is designed to teach writing skills necessary for success in college. It is required for students intending to continue in a baccalaureate program. Special emphasis is placed upon summary writing, exposition, and argumentation. This dual credit course is an option for any senior wishing to obtain credit from both WHS and Joliet Junior College.

## **HONORS JJC ENGLISH 102 - RHETORIC**

Prerequisite: English 101  
Class Level: 12  
Credit: .5 at WHS, 3 at JJC  
Cost: \$50-Will be credited to your JJC account if you enroll at JJC full time after graduation.

This **weighted** course provides continued training and practice in composition and research processes. Students will analyze a variety of texts and write several essays, including a 2,500+ word research paper. This dual credit course is an option for any senior wishing to obtain credit from both WHS and Joliet Junior College.

## **ENGLISH IV**

Prerequisite: English III  
Class Level: 12  
Credit: 1

English IV provides a survey of representative literature by a variety of authors, including foreign and American authors. This course explores the literature from Britain's Anglo-Saxon age to America's Post-Modernist/Contemporary literature period. An emphasis on preparation for college-bound students and those entering the workforce will be balanced through possible guest speakers, teacher led lectures and an in-depth literary survey.

## **READING SEMINAR**

Prerequisite: None  
Class Level: 9  
Credit: .5

This freshman course will provide students with intensive and skills-based instruction in the art and science of reading. Articles involve social issues and current events. Discussions will require critical thought about literature. The main purpose of this semester-long course will be twofold: to provide SKILLS instruction and practice in the various types of reading that appear on standardized tests and to encourage and develop enthusiasm for reading. Research-based, this course will focus on the key skills that students must master to become effective readers (1) previewing, (2) questioning, (3) question/answer connections, (4) personal connections, (5) visualizing, (6) journaling, (7) summarizing, (8) inferring, and (9) critical thinking. Students in Reading Seminar will increase knowledge of their own learning styles, studying techniques, and self-awareness as a reader and learner.

## **READING STRATEGIES**

Prerequisite: None  
Class Level: 9, 10, 11  
Credit: 1

The Reading Strategies course focuses on deeper understanding of nonfiction and the types of technical reading that commonly appears on standardized tests. The course will provide instruction in analyzing various types on non-fiction text, including: newspaper and magazine articles, speeches, essays, memoirs and biographies, and technical/vocational manuals. Reading and analyzing graphic data will also be a focus for this course. The Reading Plus program (in a computer lab setting) and specific preparation for the reading SAT test will also be emphasized in the class. Vocabulary

and SAT practice activities will be a major emphasis in the course, along with a specific study of a variety of nonfiction reading sources.

## **SPEECH**

Prerequisite: English I  
Class Level: 10, 11, 12  
Credit: .5

This class introduces students to principles of interpersonal communication and public speaking techniques. In addition, skills in developing a dynamic verbal profile and confidence in oral presentations will be enhanced. Students will be expected to participate in class discussions and to deliver a variety of speeches: commemorative, informative, demonstrative, impromptu, and persuasive.

## **MYTHOLOGY**

Prerequisite: "C" average in English II or English III, or concurrent enrollment in Honors English II with teacher recommendation  
Class Level: 10, 11, 12  
Credit: .5

This course is a survey of classical mythology as employed by the Greeks, Romans, and Norsemen, in their literature, art, and civilization. Topics covered include: the creation and generations of the gods, goddesses, monsters, and mortals. Major and minor heroic cycles of the Greek legend, including the Trojan War and its aftermath, and the legends and folk tales of Roman and Norse Mythology are also covered. This course will introduce students to the many characters and tales of classic mythology. Special emphasis will be placed on the connections between ancient lore and the world of today.

# **FOREIGN LANGUAGE**

## **SPANISH I**

Prerequisite: "B" average in 8<sup>th</sup> Grade Language Arts and the teacher's recommendation, or "B" average in English I  
Class Level: 9, 10, 11  
Credit: 1

"Nuestra Historia" is a digital, standards-based Spanish curriculum that balances language acquisition with communication fluency. The program uses technology designed to integrate language and culture to teach and motivate students, and is available on all devices anywhere with an internet connection. Pair and group work are used to provide communicative language practice. Writing, audio, and video activities are used to exchange information and interpret meaning through thematic chapters. Projects emphasize real-life situations and the use of the language. Computer activities include online review for tests, providing a range of activities and tasks to reinforce vocabulary and grammar skills as well as web-based lesson plans linked to the authentic Spanish-speaking world.

## **SPANISH II**

Prerequisite: "C" average in Spanish I and teacher recommendation  
Class Level: 10, 11, 12  
Credit: 1

"Nuestra Historia" continues the multi-step process begun in Spanish I with a digital textbook that is used in a standards-based Spanish curriculum that balances language acquisition and communication. The program uses technology designed to integrate language and culture to teach and motivate students. Pair and group work are used to provide communicative language practice. Writing, audio, and video activities are used to exchange information and interpret meaning through thematic chapters. Projects emphasize real-life situations and the use of the language. Computer activities include online review for tests, providing a range of activities and tasks to reinforce vocabulary and grammar skills as well as web-based lesson plans linked to the authentic Spanish speaking world.



## HONORS SPANISH III

Prerequisite: "B" average or better in Spanish II and teacher recommendation  
Class Level: 11, 12  
Credit: 1

Honors Spanish III is a **weighted** class for highly motivated students. It is proficiency oriented with more complex structures and emphasis of communication skills. It moves at a faster pace than Spanish I or II. Students are expected to be able to handle working more independently and being self-starters. Students will be required to speak only in Spanish for class sessions. The "Realidades 3" textbook is used in a standards-based Spanish curriculum that balances grammar and communication. The program offers technology designed to integrate language and culture to teach and motivate all students. Pair and group work are used to provide communicative language practice. Writing, audio, and video activities are used to exchange information and to interpret meaning through thematic chapters and projects that emphasize real-life situations and use of the language. Culture units emphasize appreciation of the Spanish-speaking world. Computer activities include online review for tests, providing a range of activities and tasks to reinforce vocabulary and grammar skills as well as web-based lesson plans linked to the authentic Spanish-speaking world.

## HONORS SPANISH IV

Prerequisite: "B" average or better in Spanish III and teacher recommendation  
Class Level: 12  
Credit: 1

This **weighted** course is designed for highly motivated students. This course is conducted entirely in Spanish to facilitate and enhance the students' Spanish language comprehension. Instead of language acquisitions, this course is proficiency oriented and students will be assessed using ACTFL proficiency standards. Students will read, analyze, discuss, and write on a variety of contemporary and cultural topics, with a focus on social justice issues.

# SCIENCE

## BIOLOGY I

Prerequisite: None  
Class Level: 9, 10  
Credit: 1

This freshmen level class will include the main concepts of Life Sciences: molecules to organisms, ecosystems and interactions, energy, heredity and inheritance, and evolution. Lab experiences will include microscope work and inquiry based learning.

## BIOLOGY II

Prerequisite: Biology I  
Class Level: 10, 11, 12  
Credit: 1

Biology II is a lab and research driven class with an emphasis on the environment and organism structure. Students should be prepared for dissections as well as group and personal lab inquiries. Topics that will be focused on will be Ecology, Plants, and Human Anatomy with an emphasis on structure and pathology. This class is designed for those that want to continue in sciences after requirements are finished and may want to pursue a career in a biology base field.

## HONORS BIOLOGY

Prerequisite: Teacher Recommendation  
Class Level: 9  
Credit: 1

Material from both Biology I and Biology II will be covered in this **weighted** honors course. Honors Biology may not be taken if the student has already completed Biology I. In this in-depth, fast-paced course, students will explore the topics of: cell biology, genetics, evolution, and zoology through laboratories, projects, and dissections not offered in other biology classes. A student should expect homework each class period.

## PHYSICAL SCIENCE

Prerequisite: Teacher Recommendation if you want to double up with Honors Biology in freshman year.  
Class Level: 9, 10  
Credit: 1

Physical Science provides a foundation in the three scientific fields of Chemistry, Physics, and Earth Science. This course will focus on a broad spectrum of matter, energy, and Earth's structure. A variety of applications will be covered in this course including: mastering the metric system, recognizing chemical and physical changes, using formulas to solve matter and energy, and applying concepts in a laboratory or activity. Other topics in the course include: understanding the periodic table, energy, Newton's three laws of physics, and earth science.

## HONORS EARTH AND SPACE SCIENCE

Prerequisite: Successful completion of Physical Science or concurrent enrollment in Honors Chemistry I with teacher recommendation  
Class Level: 10, 11, 12  
Credit: 1

In this **weighted** course, students will explore the major underlying principles of the earth sciences and cosmology including: geology, oceanography, meteorology and astronomy. The course will focus on geological concepts such as identifying and classifying rocks. Students will perform and create laboratory activities ranging from water filtration to alternative energy devices. This course is designed to develop awareness and appreciation for corresponding geo-systems and their important interrelationships, as well as an understanding of the scientific approach to problem solving. Emphasis will be placed on interactions between earthly systems in order to better understand the earth as a single, multidimensional network operating in unison with the laws of physics, chemistry, and biochemistry. Special topics will include: the structure and composition of the earth, plate tectonics, weathering and mechanical erosion, the earth's weather systems, the rock and hydrologic cycle, the solar system, the sun, galaxies, and theories of the universe.

## HONORS CHEMISTRY

Prerequisite: Concurrent enrollment in Algebra II or a "B" in Algebra I and successful completion of Honors Biology I Or "B" or above in Integrated Science, and teacher recommendation  
Class Level: 10, 11, 12  
Credit: 1

This **weighted** course is designed for those students who are college bound. It is a prerequisite for AP Biology, Chemistry II, and Physics. Math and calculator skills are utilized throughout the year. Topics of study will include: significant figures, matter and energy, moles, periodic table, bonding, acids and bases, and stoichiometry. This is a rigorous course that is designed to teach students to have the "habits of mind" necessary for advanced studies. Advanced Algebra skills are necessary to be successful in chemistry.

## HONORS AP CHEMISTRY

Prerequisite: Completion of Honors Chemistry with at least a "B" average for each semester.  
Class Level: 11, 12  
Credit: 1

This **weighted** and academically-rigorous course will emphasize inquiry-based learning, conceptual understanding, and the development of advanced reasoning skills necessary for college and professional chemistry. The course is a combination of lecture, lab, and homework that is intended for highly-motivated students interested in pursuing a career in science. At least 25% of instruction time is spent in hands-on laboratory experiences integrated throughout the course. Honors AP Chemistry builds upon fundamental chemical and physical concepts such as a) atoms, molecules, and moles, b) chemical systems, c) the conservation of energy and mass, d) ionic and covalent bonding, e) molecular geometry and electron configurations, f) chemical reactions, equations, and stoichiometry, g) the periodic table and periodic trends, and h) the states of matter and thermodynamics, among others. All students will be given the option to take the AP exam in the spring, and an exam fee is required. Students will be provided a summer study packet to help prepare them for the concepts and material presented throughout the course.

## HONORS ANATOMY AND PHYSIOLOGY

Prerequisite: Completion of Biology II or Honors Biology with a "B" or better average and teacher recommendation.  
Class Level: 11, 12  
Credit: 1

This **weighted** course is intended for college-bound students with medical or kinesiology interest. The topics will describe the human body systems. Lab work will include: microscopy, a sheep heart, sheep brain, and kidney. Independent research topics will be assigned.

## HONORS AP BIOLOGY

Prerequisite: Honors Anatomy and Physiology must be taken prior to or concurrently, an "A" average in Biology II or "B" average in Honors Biology, and "B" average in Honors Chemistry I, and teacher recommendation.  
Class Level: 11, 12  
Credit: 1

This **weighted** class is intended for students willing to commit a significant amount of time to a rigorous course in Biology designed to prepare them to take a placement exam given in May. The course is a combination of lecture, lab, and homework with emphasis on investigation, inquiry and experimental design. Topics include: ecology/basic biochemistry, cells, energy transformation, genetics and DNA technology, evolution, plant sciences, and human biology. A summer assignment is given. All students in this class will be given the option to take the AP Exam in the spring and a fee is required.

## HONORS PHYSICS

Prerequisite: Successful completion of Honors Chemistry I and Honors Precalculus must be taken prior to or concurrently, and teacher recommendation.  
Class Level: 11, 12  
Credit: 1

This **weighted** course explores energy transformation within mechanical, fluid, thermal, and electrical systems. Topics of studies include classical physics (kinematics, momentum, work-energy, gravity, electromagnetism, thermodynamics, light, optics, and states of matter), coding, Robotics, and modern physics concepts. This course is math and laboratory extensive, and ties concepts to real world models. Assessments will include engineering projects, tests, quizzes, homework, laboratory reports, and guided practice.

## SOCIAL SCIENCES

### WORLD CIVILIZATIONS I

Prerequisite: None  
Class Level: 9, 10, 11, 12  
Credit: .5

World Civilizations I introduces students to the interaction between peoples and their lands. In addition to learning the principles and terms of geography, students will learn world cultures, religions, histories and economies with emphasis on World Cultures. The course will explore the dynamics of international relations and the burgeoning global economy. Students will explore issues of race, ethnicity and technology as well as examining environmental issues within the global context. The physical geography of the world is the starting point and from there this class will develop the ideas of social, economic and political geography. \*Emphasis on African Area, Asian Area, and Latin America.

### WORLD CIVILIZATIONS II

Prerequisite: None  
Class Level: 9, 10, 11, 12  
Credit: .5

World Civilizations II introduces students to the interaction between peoples and their lands. In addition to learning the principles and terms of geography, students will learn world cultures, religions, histories and economies with emphasis on World Cultures. The course will explore the dynamics of international relations and the burgeoning global economy. Students will explore issues of race, ethnicity and technology as well as examining environmental issues within the global

context. The physical geography of the world is the starting point and from there this class will develop the ideas of social, economic and political geography. \* Emphasis on Middle Eastern Area, Modern Europe, and Canada.

## **INTRODUCTION TO U.S. HISTORY**

Prerequisite: None  
Class Level: 9, 10  
Credit: .5

Introduction to U.S. History covers the time period of 1400-1865 or the era of European exploration through the U.S. Civil War. Major areas of study include: English colonization, the Revolutionary War, the birth of the United States, expansion and westward migration, Industrialization and the Progressive Era, the slave issue and the Civil War. While examining these events, the class will seek to develop the ideas of: cause and effect, evaluating fact vs. opinion, using maps, reading charts and graphs, interpreting political cartoons and doing basic historical research. Additionally, the class will seek to make connections from history to modern political situations.

## **CURRENT EVENTS**

Prerequisite: None  
Class Level: 9, 10  
Credit: .5

Current Events is an in-depth study of the events that are taking place throughout the world. Students will study global issues, along with local, state, and U.S. events. Students will learn to make informed judgments about international, national, and local news topics. Students will use skills such as decision-making, cooperation, discussion, and speech to debate topics and form opinions on events that are presented. The ultimate goal is to raise student awareness of the global world.

## **AMERICAN CONFLICTS – HISTORY VS. HOLLYWOOD**

Prerequisite: None  
Class Level: 9, 10, 11  
Credit: .5

Students will learn to interpret genre films (and some documentaries) that illustrate on developments from 1776 to 2007. There have been hundreds of instances of the deployment of United States military forces abroad and domestically. The list through present is based on United States Congress House Committee on International Relations is shown below. The dates show the years in which U.S. military units participated.

* Revolutionary War - 1776-1783	* World War I – 1917- 1920
* Mexican-American Wars 1830-1848	* World War II – 1941-1945
* Civil War – 1861 – 1865	* Cold War 1947-1990
* Korean War 1950 – 1953	* Persian Gulf War – 1991
* Vietnam Conflict – 1962 – 1973	* Global War on Terrorism – 2001 - Present

## **AMERICAN CULTURE – HISTORY VS. HOLLYWOOD**

Prerequisite: None  
Class Level: 10, 11, 12  
Credit: .5

Students in this course will learn to interpret genre films (and some documentaries) illustrate that as American Culture. The United States has traditionally been known as a melting pot, but recent academics tend towards cultural diversity, pluralism and the image of a salad bowl, rather than a melting pot. There are many integrated but unique subcultures within the United States and events that influenced their development. The cultural affiliations an individual in the United States may have, commonly depend on social class and a multitude of demographic characteristics.

## **U. S. HISTORY**

Prerequisite: None  
Class Level: 11  
Credit: 1

This required United States history course will provide students with an exposure to America's growth, expansion, and evolution into a world power, so that they will develop an understanding and knowledge of the world. Because of American heritage and convictions, Americans champion the cause of freedom and seek to promote it. To comprehend and meet the challenges facing America today, students will examine these convictions. During the first semester, U.S. History students will study the growth of our nation following the Civil War through its struggle as a world power in World War I and the Great Depression. In the second semester, this course will provide students with an understanding of history and its impact upon his/her life and the environment by analyzing the historical events after World War II. Students investigate recent events and relate them to the past history of the nation while receiving a broad view of the people and events that contributed to the foundation of this country and the operation of our system of government. This course will provide an account of the American past with the focus on history as a process. It will encourage students to think historically and to develop into citizens who value and understand the past in order to appreciate the future with concentrations from World War II through the present.

### **HONORS AP UNITED STATES HISTORY**

Prerequisite: "B" average in English and recommendation of English or social studies teacher  
Class Level: 11  
Credit: 1

This **weighted** class provides an opportunity for high school students to pursue and receive credit for college-level U.S. History. Students will learn both the content and skills necessary for successful completion of the AP Test to be given in May. This test is optional and requires a fee. The course is designed for highly motivated, academically-advanced students who have good reading, writing, and study skills. Students will do an extensive amount of reading and reflection, historical essay writing, note taking, and analysis of historical documents. A comprehensive exam will be administered at the end of the course.

### **CIVICS**

Prerequisite: U. S. History  
Class Level: 12  
Credit: .5

The required Civics course is designed to assist young people to acquire and learn to use the skills, knowledge, and attitudes that will prepare them to be competent and responsible citizens throughout their lives; address government institutions; discuss current and controversial issues; and include service learning and simulations of the democratic process. By studying civics, the students will learn how our government, economic system and political system are supposed to operate. Students will understand why the founding fathers wanted the colonies to break away from the British crown, and why they set up the United States government as a republic instead of as a democracy. Basically, students will examine: the principles and obligations of citizenship, civil rights and civil liberties, the structure and function of federal, state, and local governments, and the electoral process as they prepare for the state-mandated tests.

### **HONORS JJC POLITICAL SCIENCE 101 – AMERICAN NATIONAL GOVERNMENT**

Prerequisite: Honors AP U.S. History with a "C" average or U.S. History with a "B" average and teacher recommendation.  
Class Level: 12  
Credit: .5 at WHS, 3 at JJC  
Cost: \$50-Will be credited to your JJC account if you enroll at JJC full time after graduation.

This **weighted** course is an introduction to the structure, principles, processes, and problems of American government. It examines the impact of foreign policy, dissent, civil rights, and economic issues on contemporary American politics. It also analyzes the shaping of public policy by individuals and groups, both in and out of government. This dual credit course is an option for and senior wishing to obtain credit from both WHS and Joliet Junior College.

### **CONSUMER ECONOMICS**

Prerequisite: None  
Class Level: 12  
Credit: .5

Economics will help the student become an efficient consumer and a more knowledgeable citizen. The basic structure of the course consists of money management, economic concepts, and consumer issues. Topics will include: general economic principles, American economic system, consumer in the marketplace, money management (budgeting, record keeping, using credit, checking, saving, investing), wise buying (insurance, housing, transportation), and the roles of government, labor, business, and agriculture.

## **NATIVE AMERICAN STUDIES**

Prerequisite: None  
Class Level: 10, 11, 12  
Credit: .5

This course will examine the beginnings of Native Americans, the culture, art and history of the many tribes. We will discover the contributions, perils, and even hardships that Native Americans faced over the years. Our journey will showcase the heritage of Illinois and the many talents of Native Americans. The course will focus on a chronological history, with anthropological and archaeological foundations, of the Native Americans from early migration to the present.

## **SOCIOLOGY**

Prerequisite: None  
Class Level: 11, 12  
Credit: .5

Sociology is the study of human groups and their interaction. It is suggested for college-bound students. The course should provide the individual with a better understanding of how groups influence the individual and society. Topics will include: culture, social change, the family, minority groups, social control, roles, social classes, population change, religion, crime, etc.

## **PSYCHOLOGY**

Prerequisite: None  
Class Level: 11, 12  
Credit: .5

Psychology is an introduction to the study of human behavior. It is a suggested social studies elective for college-bound students. Topics will include: a thorough study of the brain, famous psychologists, learning principles, emotions, personality traits, memory/mind functions, and psychological disorders.

# **BUSINESS & MARKETING**

## **INTRODUCTION TO BUSINESS**

Prerequisite: None  
Class Level: 9, 10  
Credit: .5

Introduction to Business is designed to provide students with a broad knowledge and understanding of the American economic system. Units of study include: bank accounts, credit, insurance, real estate, stocks & bonds, business organization/management structures, business ethics, and the economy. Students are introduced to career exploration and career planning.

## **ACCOUNTING I**

Prerequisite: Successful completion of Algebra I  
Class Level: 10, 11, 12  
Credit: 1

This course is designed to introduce students to the language of business-accounting. Students work through the accounting process of a start-up service business set up as a sole proprietorship. Coursework includes: creation and analysis of accounting records, preparation of financial statements, business terminology, mathematical functions and financial ethics. Additional projects include the use of accounting software and a personal finance unit emphasizing the importance of budgeting.

## **BUSINESS MANAGEMENT**

Prerequisite: Introduction to Business recommended  
Class Level: 10, 11, 12  
Credit: .5

This course is structured to provide students with an understanding of the entrepreneurial process from brainstorming ideas to creating a business plan. Topics pertain to: human relations, management, communications, and entrepreneurial skills. Students create a unique company they would like to open in Wilmington and develop a business plan for their company. Students will then present their company idea to the class. This class will focus on group work and relations like those needed in the business world as well as independent writing and decision making.

## **ADVERTISING / MARKETING**

Prerequisite: Introduction to Business recommended  
Class Level: 10, 11, 12  
Credit: .5

Students will learn how companies develop sales and marketing strategies for products and services in today's markets. This course introduces students to the knowledge and skills necessary to create promotional campaigns utilizing a range of methods from store layout to packaging details. Additional areas of study include: the importance of communication and interpersonal skills, the creation of newspaper, magazine, television and radio advertisements and the importance of public relations in the business world.

## **BUSINESS & PERSONAL LAW**

Prerequisite: Other business electives recommended  
Class Level: 10, 11, 12  
Credit: .5

This course is designed to expose students to the American legal system and how it affects their personal and professional lives. Studies will provide relevant coverage of traditional business topics while stressing the legal principles essential to everyday life. This course incorporates local guest speakers and an in-class "Mock Trial".

## **MICROSOFT OFFICE PROJECTS**

Prerequisite: None  
Class Level: 9, 10, 11, 12  
Credit: .5

Students will use the Microsoft Office suite to further their knowledge and skill set in word processing, spreadsheet, database, and presentation applications. The course will be project-based and students will use multiple resources including the internet to complete these projects. The result of these projects will be printed documents and oral presentations. **JJC Dual Credit is available for this course for juniors and seniors but is subject to change upon revisions made from Joliet Junior College. WHS has no control over this entity.**

## **DIGITIZED PRESENTATIONS**

Prerequisite: Microsoft Office Projects  
Class Level: 9, 10, 11, 12  
Credit: .5

An extension of Microsoft Office Projects, this class will offer students the opportunity to expand their knowledge of Microsoft PowerPoint. PowerPoint is a leader in presentation software and is a valuable tool in the educational and business world. Students will explore the extras PowerPoint has to offer to make their presentations memorable. This is a project-based class that will utilize the Internet along with other media to assist students in their presentations. Students will be expected to present their projects in front of class as part of their grade. **JJC Dual Credit is available for this course for juniors and seniors but is subject to change upon revisions made from Joliet Junior College. WHS has no control over this entity.**

## SPREADSHEET/DATABASE

Prerequisite: Microsoft Office Projects and freshmen must have at least a "B" in math in 8<sup>th</sup> grade  
Class Level: 9, 10, 11, 12  
Credit: .5

This course, a continuation of Microsoft Office Projects, provides an extensive study of spreadsheets and databases using the Microsoft Excel and Access applications. Students will gain a further understanding and appreciation for these applications not only in the workplace, but also in everyday life. **JJC Dual Credit is available for this course for juniors and seniors but is subject to change upon revisions made from Joliet Junior College. WHS has no control over this entity.**

## DESKTOP GRAPHICS

Prerequisite: Microsoft Office Projects  
Class Level: 9, 10, 11, 12  
Credit: .5

Students will be introduced to one of the leading industry standards in computer graphic creation and manipulation, Adobe Photoshop. During this project based class students will learn to use the tools and many options of the software along with becoming aware of differing aspects of each project such as color, flow, and use of special effects. Images will be created from scratch, templates, and scanned pictures. Projects will include logos, flyers, letterheads, self-portraits, and animated icons. This course will utilize the Internet along with other resources to broaden the student's learning. **JJC Dual Credit is available for this course for juniors and seniors but is subject to change upon revisions made from Joliet Junior College. WHS has no control over this entity.**

## INTRODUCTION TO MULTIMEDIA EDITING

Prerequisite: Desktop Graphics  
Class Level: 10, 11, 12  
Credit: .5

This class introduces students to the process of editing both audio and video media. Students will learn the steps to putting together an entire multimedia project while using software applications, Audacity and Adobe Premiere. Projects will include shooting video and recording audio in and around the WHS campus along with possible off-campus locations. Finalized media projects may be uploaded to YouTube for outside critiques and viewing.

## INTRODUCTION TO JAVASCRIPT

Prerequisite: Microsoft Office Projects  
Class Level: 11, 12  
Credit: .5

Students will be introduced to computer programming code JavaScript (the language of the Internet), through the use of a web based program called CodeHS. This course teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills.

## INTRODUCTION TO CYBERSECURITY

Prerequisite: Introduction to Java Coding or Instructor consent  
Class Level: 11, 12  
Credit: .5

As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that companies and individuals take precautions to protect themselves from the growing threat of cyber-attacks. This course prepares students with crucial skills to be responsible citizens in a digital future. Topics included are: foundational cybersecurity topics including digital citizenship and cyber hygiene, the basics of cryptography, software security, networking fundamentals, and basic system administration. This will be a web based course delivered through CodeHS.



## **YEARBOOK/ADVANCED MULTIMEDIA**

Prerequisite: Teacher selection  
Class Level: 9, 10, 11, 12  
Credit: 1 (full year)

This year long course will have a production-style format that will focus on the various skills needed to produce the Wilmington High School yearbook and will culminate in the creation of the annual senior video. Students will learn how to use multiple types of media equipment while assisting other students and staff with the same equipment. Students will be working with various software titles to create CD'S and DVD's for multiple projects in and out of the school environment. Students will be taught the vocabulary and language of the yearbook process, the elements of design, the writing process, and the photography needed to create the book. Further student responsibilities will include attending extra-curricular events as needed to cover assigned topics, assisting in the marketing of the yearbook and participating in fundraisers. This is a year-long commitment and class work may require attendance after the regular school year has ended to complete production. This class may be repeated.

## **INDUSTRIAL TECHNOLOGY**

### **MECHANICAL DRAFTING**

Prerequisite: None  
Class Level: 9, 10, 11, 12  
Credit: 1

Mechanical Drafting is an introduction to the graphic language of drafting. Throughout this course students will become familiar with the tools and terms, and programs used in the industry. Basic fraction work and geometric theories are applied to create precision mechanical drawings using drafting equipment, AutoCAD, and Fusion 360. Skills taught here benefit students who have an interest in graphic design, engineering, architecture, mechanics or any other drafting related field.

### **ARCHITECTURE: RESIDENTIAL DRAFTING**

Prerequisite: None  
Class Level: 10, 11, 12  
Credit: 1

Basic Residential Drafting is a course where students become exposed to the detailed elements of residential construction in relation to print drawing. From foundation and framing to roofing layouts and electrical plans, students will learn the information needed to plan and design a residential structure. The residential structure is broken down to its basic elements (Living, Service, and Sleeping Areas). This is done in order to focus students on good design practice and proper planning techniques. Students will then learn each phase of residential construction while drafting prints that guide this process. Beginning surveying and plot plans using GPS/GIS will be introduced throughout the year. Developing an entire set of residential plans and building a scale model are the culminating projects of this course.

### **ADVANCED ARCHITECTURAL DRAFTING**

Prerequisite: Architecture: Residential Drafting  
Class Level: 11, 12  
Credit: 1

Advanced Architectural Drafting is a more intense look at architecture. Through multi-unit development (duplexes/apartments), commercial building design, and general city planning, students will continue to refine their drafting skills. Students will connect local building codes with an adapted design that fits certain parameters. GPS/GIS strategies will be applied showing the development and advances in the drafting industry. Hands on activities that include trips to job sites and buildings may be a part of this course. This may require those who enroll to meet before or after school occasionally.

### **ORIENTATION TO INDUSTRIAL EDUCATION**

Prerequisite: None  
Class Level: 9, 10, 11  
Credit: 1

This course is a series of nine-week units in production technology, transportation technology, communication technology, and energy utilization technology. Each unit will cover the: resources, technical processes, industrial application, technological impact and occupations encompassed by that system. Units in production will include: product design, materials and processes, tools and equipment, safety procedures, corporate structure, management, research and development, production planning, mass production, marketing and servicing. Units in transportation will include: material handling, atmospheric and space transportation, marine transportation, terrestrial transportation, and computer uses in transportation. Units in communication will include: design and drafting, radio and television broadcasting, computers in communication, photography, graphic arts, and telecommunications. Units in energy utilization will include: conservation of energy, electrical fundamentals, solar energy resources, alternate energy resources, fossil fuels, nuclear power, energy conservation, and computer uses in energy technology.

## **INTRODUCTION TO POWER AND LOGISTICS**

Prerequisite: Intro to Industrial Ed is recommended  
Class Level: 10, 11, 12  
Credit: 1

This course is a series of 9-week units in various technologies in the power and logistics fields. Units cover scientific properties behind revolutionary and traditional building and transportation industries. Each unit will focus on the implementation of the technologies on a residential, commercial, and government spectrum. Skills taught in this course will benefit students seeking skill-based trades requiring a technical degree.

## **BUILDING CONSTRUCTION TECHNOLOGY**

Prerequisite: None  
Class Level: 11, 12  
Credit: 2 per semester  
Note: Student must supply his/her own tools

This course provides experience and activities designed around safety, power tools, and construction-related math. Emphasis will be placed on: footings and foundations, masonry, framing, sheathing, wiring, plumbing, roofing, siding, etc. Students will develop and produce one or more class projects. This course is useful for students who plan to enter the construction field, or those who want to be able to handle "around-the-house" projects.

# **FINE ARTS**

## **ART I - FUNDAMENTALS**

Prerequisite: None  
Class Level: 9, 10  
Credit: 1

Art fundamentals is a yearlong course that is designed to provide a variety of experiences in the visual arts for both students who plan to continue in art and students who wish to take only one year of art. Students will explore the area of: drawing, and shading, perspective, print making, design, painting, sculpture, art history and various other art forms. These areas will be studied through a variety of media such as: pencil, pen and ink, marker, pastels, photography, paint, clay and other materials. Through these experiences, students will gain both a basic knowledge of the visual arts and a variety of skills necessary for entry into Art II. Students will be required to keep a sketchbook.

## **ART II**

Prerequisite: Art I - Fundamentals  
Class Level: 10, 11, 12  
Credit: 1

This studio course spans the full year; it is designed to teach students additional techniques and creative thought processed as well as new applications for the skills and concepts learned in Art Fundamentals. This will result in students having larger repertoires of responses for solving creative problems, and having a greater understanding and appreciation of the visual arts. Students who have successfully completed Art Fundamentals will have the background knowledge and skills necessary for this course. The content of Art II will focus on the understanding and use of various aspects of two and three-dimensional art and art history, and may include: drawing, painting, sculpture, photography, graphic art, print making

and pottery. Students will be required to maintain a sketchbook as preparation for projects as well as homework assignments.

### **ART III**

Prerequisite: Art II  
Class Level: 11, 12  
Credit: 1

This year long course is designed for students who have completed Art Fundamentals and Art I and are looking for further expand their art knowledge and experiences. This course will be a continuation of techniques and materials studied in the first two classes. The techniques and materials used will be more sophisticated; therefore, greater refinement in their application will be stressed. Higher levels of creativity will be expected of students as they apply familiar as well as new techniques. Students will also be required to demonstrate better compositional skills and work towards the development of a personal style and self-expression. Students will work on more individualized projects and advanced techniques in: digital imagery, Photoshop, drawing, painting, printmaking, sculpture, and design. Art history and various styles will be explored. Students will be required to keep a sketchbook for homework and projects.

### **ART IV**

Prerequisite: Minimum of "B" in Art III and teacher consent  
Class Level: 12  
Credit: 1

This highly individualized course is designed for the serious artist. Emphasis will be on self-direction and motivation, self-expression, experimentation, and in-depth study of a particular area of the student's choice. For the first semester, students will be responsible for developing their own goals and objectives under the direction of the instructor and then creating assignments to fulfill these goals. For the second semester, students will develop five or more sequential assignments based on a particular theme. One-on-one critiques with the instructor will be scheduled periodically. Students will be required to maintain a sketchbook (for homework and projects) and a portfolio of completed projects (to monitor progress).

### **3D ART/SCULPTURE**

Prerequisite: none  
Class Level: 11, 12  
Credit: 1

Sculpture is art that deals with 3-Dimensionality, or artwork in the round. The pieces will vary in scale/size. Some of the materials and processes we will be focused on would include, Clay (Ceramics), Glass Work (slumping and stain glass), Wood (carving), Plastic (3D printing), plaster and found objects. Upon completion of this course the student will have further understanding of implementing the concepts of Volume, Space, Mass, Balance, a working and functional knowledge of the previously mentioned materials, as well as the processes required to use those materials safely.

## **MUSIC**

### **BAND**

Prerequisite: Previous training on a band instrument and consent of instructor  
Class Level: 9, 10, 11, 12  
Credit: 1

In the course, students will learn artistic expression and technical music skills that align to the Illinois State Standards. Students are required to perform in marching band, pep band, and concert band. In addition, various other performances include: Interstate 8 Music Festival, Solo and Ensemble, Organization Contest and encouraged to audition and participate in the IMEA Band Festival.

### **MIXED CHOIR**

Prerequisite: None  
Class Level: 9, 10, 11, 12  
Credit: 1

Mixed Chorus is an ensemble class. Attendance and participation is required at seasonal evening concerts and after-school rehearsals. Students will gain a fundamental and intermediate understanding of music, starting with the basics of music reading, training the musical ear, music history, and music theory. Students will learn vocal pedagogy and choral technique. Students are assessed through vocal and written tests, active participation, and concert performances.

### **SHOWCATS**

Prerequisite: Audition in spring  
Class Level: 9, 10, 11, 12  
Credit: 1

The Showcats are a small ensemble whose focus is dynamic performance integrating vocal music and choreography. As a performance group they present concerts and entertainment for school and community organizations throughout the year. These outside performances are a required part of the class.

### **CONTEMPORARY MUSIC AND ITS EFFECT ON SOCIETY**

Prerequisite: None  
Class Level: 9,10,11,12  
Credit: .5

Students will study music from the present day, its effect on society, and where and when it began. The curriculum will include how controversial music, artists, and bands have shaped our society. The context of this class will include group discussion, projects and listening examples. Iconic figures, censorship and the study of lyrics will also be covered.

### **EVOLUTION OF JAZZ & ROCK**

Prerequisite: None  
Class Level: 9,10,11,12  
Credit: .5

Evolution of Jazz and Rock is based on listening and responding to music in its cultural context. Students will study a broad range of music types: blues, ragtime, and rock and roll. This class will cover how rock and roll formed and will include how it has affected and molded American culture.

### **MUSIC THEORY**

Prerequisite: None  
Class Level: 9,10, 11, 12  
Credit: .5

This course is for students who wish to gain a better understanding of music and how music works. Music Theory is taught as an introduction to music theory through the learning of scale patterns, chords, melody, harmony, ear training, composition, and much more. This class will incorporate music examples from various periods in history, as well as music in today's society. Although a "theory" course, students will have several opportunities to engage themselves creatively throughout the semester through compositions, group performances, etc.

### **TECHNICAL MUSICAL THEATRE**

Prerequisite: Interest in Theatre  
Class Level: 9, 10, 11, 12  
Credit: .5

Students will learn the elements of designing, performing in, and constructions the set of a live theatre production. This course is an introduction for students who are interested in majoring in Musical Theatre, Theatre Management, or Technical Theatre/Theatre Design and Technology. Students will learn and participate in the basics of set of Musical Theatre and will participate in the basics of set construction, lighting and sound consoles, and theatre management. They will learn the history of Musical Theatre and will participate in class acting techniques, including improvisation. Students will have the opportunity to apply their skills by assisting in the spring musical.

# HEALTH / PHYSICAL EDUCATION / DRIVER EDUCATION

## HEALTH

Prerequisite: None  
Class Level: 10  
Credit: .5

Health is designed to provide the student with a functional knowledge of requirements to maintain personal health. This course includes three main topics: physical, social, and mental health. During this course students will be provided an opportunity to be certified to perform CPR and to use an AED. Final grades will be based upon work sheets, exams, projects, and other work assigned. In compliance with state legislation, instruction on the medical and legal ramifications of alcohol, drug and tobacco use and abuse during pregnancy will be included. **NOTE: Students will be excused from taking or participating in comprehensive sex education if a parent/guardian submits written objections to the school administrator.**

## FRESHMAN PHYSICAL EDUCATION

Prerequisite: None  
Class Level: 9  
Credit: .5 per semester

This class is designed to give students a foundation for life long physical activity. Students will learn basic fitness principles throughout each semester. Students will be introduced to warm-up techniques, cardiovascular endurance exercise, strength exercise, and basic weightlifting exercises. Also, students will participate in a variety of individual and team games and activities. A classroom setting, using the Fitness for Life textbook, will also be utilized. Students will be assessed throughout the year on participation and knowledge of activities and fitness through observation, written work, and written assessments.

## PHYSICAL EDUCATION

Prerequisite: Freshman PE  
Class Level: 10, 11, 12  
Credit: .5 per semester

This class is designed to continue building upon the fundamentals learned from the Freshmen PE course. Students will again participate in a variety of individual and team games and activities. This class will also elaborate more on fitness principles and exercises. Students will be assessed throughout the semester on participation and knowledge of activities and fitness through observation, written work and written assessment.

## ADVANCED PHYSICAL EDUCATION

Prerequisite: Must be an athlete or have permission of instructor, sophomores must have at least a C in Freshman PE  
Class Level: 10, 11, 12  
Credit: .5 per semester

This class is designed to promote strength, flexibility, and endurance for students involved in interscholastic sports. Students will learn and participate in a variety of activities including: injury prevention, aerobic conditioning, agility, strength and weight training, and alternative fitness workouts. Students will be assessed throughout the semester on participation and knowledge of fitness knowledge through observation, daily written logs, and written assessment.

## OUTDOOR EDUCATION

Prerequisite: None  
Class Level: 11, 12  
Credit: .5

This course introduces students to outdoor activities. These activities include, but are not limited to, fishing, hiking, team building, geocaching, and fire craft. Students will also be asked to drive/ and or ride to different destinations located within 15-20 minutes of the high school.

## DRIVER EDUCATION CLASSROOM

Class Level: 9, 10, 11, 12 - Multi-level with preference to upperclassmen 15 years of age+  
Credit: .5  
Fee Charged: Behind-the-wheel (BTW) fee is \$200 (payable to WHS) / Illinois Instructional Permit fee is \$20 (payable to the Secretary of State).

Requirement: By state of Illinois requirement, students must have passed at least eight courses during the previous two semesters prior to enrolling in driver's education. **Age-appropriate freshmen may enroll in the classroom portion of driver education in the second semester if they passed all eight classes during semester one.**

Each student will meet the minimum state requirement of 30 hours of classroom instruction. The curriculum is based on decision making and experience which will prepare students to pass all Illinois Secretary of State tests and be aware of the potential hazards in various driving situations. These experiences are taught through a variety of methods which include: lectures, discussion, group learning, guest speakers, research projects, and testing. **Successful completion of the classroom portion is a requirement for graduation.**

The Behind-the-Wheel portion is conducted using a dual control car and encompasses driving in: urban, rural, neighborhood, interstate, and emergency situations. **Each student will receive six hours of driving instruction.** Enrollment in BTW is determined by birthday order, in conjunction with Physical Education classes and availability of schedule changes. **There is no guarantee that a student will complete BTW before his/her 16<sup>th</sup> Birthday.**

## ADDITIONAL ELECTIVE ACADEMIC COURSES

### PARA-PROFESSIONAL INTERNSHIP

Prerequisite: Must be in good academic standing  
Class Level: 12  
Credit: 1 per semester

This course will allow students to find and work as an intern at an approved arranged placement. Students will meet with a guidance periodically to check in and discuss internship. Interested students should meet with a Guidance Counselor to discuss possibilities. This course requires a year-long commitment.

### OFFICE AIDE

Prerequisite: Recommendation of front office staff  
Class Level: 11, 12  
Credit: .5 per semester

Students will assist a supervisor with assigned tasks. Students will be graded on a Pass/Fail basis. The four year PE requirement will not be waived to allow a student to be an Aide.

### KITCHEN AIDE

Prerequisite: Recommendation of kitchen staff  
Class Level: 11, 12  
Credit: .5 per semester

Students will assist kitchen staff in food preparation, kitchen clean up and additional duties as assigned. Students will be graded on a Pass/Fail basis. The four year PE requirement will not be waived to allow a student to be an Aide. Students taking this option must take 3.5 years of Physical Education.

### LIBRARY/MEDIA SERVICE AIDE

Prerequisite: "C" average or better, no disciplinary problems, interest in reading and/or audio-visual equipment and computers; permission of instructor  
Class Level: 11, 12  
Credit: .5 per semester

Students taking this course will receive training as a library/media assistant. Emphasis will be placed on library routines, including: circulation procedures, processing, distribution of materials and research techniques. Assessment will be

based on performance. Students will be graded on a Pass/Fail basis. Students taking this option must take 3.5 years of Physical Education.

## COLLEGE COURSES AT JJC

Students must provide their own transportation for JJC classes or take them online. Juniors and seniors who are "on-track" for graduation credits, will have the opportunity to enroll in JJC courses during the school day. Students will pay all course costs, including book fees, directly to JJC after pre-registering in the WHS Guidance Office. **To receive dual credit, students must take 3 credit hour 100 level class and submit a copy of their official grade report to the WHS Guidance Office. JJC grades for academic classes will be weighted.**

## COLLEGE COURSES AT WHS

WHS students who meet the established course pre-requisites (refer to course descriptions) may also have the opportunity to enroll in dual credit courses being offered at WHS. In addition to several entry-level technology courses which qualify for dual credit, there may also be opportunities to enroll in the following dual credit courses at the high school in place of regular English; English 101, English 102 and Poli Science 101. JJC has attached a \$50.00 fee for all dual credit courses. This assigned fee is significantly less than the price which would be paid for the same college credit earned at a junior college or 4-year institution. Textbook costs are also the responsibility of the student. Students planning to enroll in any dual credit class offered at Wilmington High School (except for Technology classes) must receive satisfactory scores on the COMPASS Test.

Dual credit courses which offer simultaneous high school and college credit for completion are typically recognized by the vast majority of colleges and universities; however, it is always the responsibility of students and their parents to verify that credits earned will be accepted by their college of choice. All grades for college dual credit courses (except for courses offered at WHS within the Technology sequence and WILCO courses) will be weighted.

## ONLINE TEACHING & LEARNING

### Illinois Virtual School

Students may also choose to enroll in a virtual course being offered through the Illinois Virtual School ([www.ilvirtual.org](http://www.ilvirtual.org)). Students would be limited to taking one of these courses per school year-and these offerings will not be considered for the meeting of specified WHS graduation requirements unless administrative approval is granted. This avenue may be helpful for credit recovery and/or the completion of any desired elective offerings which are not currently offered at WHS. Students will be responsible for paying \$190 per course / per semester for elective courses.

### Joliet Junior College

WHS students have the option to pursue virtual learning opportunities through a few different avenues. Numerous dual credit courses in all content areas are offered each year by JJC. An updated list of course offerings (including both in person in Joliet and virtually via the Web) can be found at <http://jjc.edu/academics/class-schedule/Pages/default.aspx>. To view all JJC online offerings, you should select the: 1. term or semester desired; 2. Course subject (ie. History, Mathematics, etc.); and 3. 'online' option under the Course Type drop-down box. All policies applying to students travelling to JJC for programming will also apply to students enrolling in JJC web-based offerings. Students will pay all course costs directly to JJC; and to receive dual credit – students must submit a copy of their official grade report to the WHS Guidance Office.

### OpenCourseWare – Independent Study

WHS students also have the opportunity to pursue individual educational interests for Elective Credit via an Independent Study of OpenCourseWare (OCW) content. OCW is an initiative which helps to make world-class educational opportunities and resources from colleges and universities available free of charge to people throughout the world via the internet. These experiences are not accompanied by official college credit or access to formal certifications; however, OCW does open up many doors for learning and access to very valuable resources in a wide variety of areas of study. Students may request to pursue learning in areas of interest related to current passions or future career aspirations via OpenCourseWare offerings, which are being made available by institutions such as Harvard University, University of Michigan, University of California at Berkley, Stanford University, and many more. All Independent Study requests must be approved by the WHS Principal, and will not be allowable as substitutes for any specific courses which are required for high school graduation. Juniors and Seniors may request to register for an Independent Study as an elective course offering, limited to one per semester. Independent Studies will be graded on a Pass/Fail basis, with specific requirements being agreed upon by the student and the building principal, with the assistance of a cooperating teacher in the appropriate content area whenever possible. Although students will not be assigned to a specific classroom during the

period which is set aside for Independent Study, they will be required to be in attendance at WHS during these time periods and will have access to the required technology to assist in completing the approved OCW lessons and activities.

## **WILCO AREA CAREER CENTER 2020-2021 COURSE OFFERINGS [www.wilco.k12.il.us](http://www.wilco.k12.il.us)**

Wilco's programs are designed to offer students career-based courses providing skills required for continuing education and/or employment upon completion. Students attend one of three sessions, and **will be charged a \$100.00 fee for enrollment**. Courses are scheduled at the home school. Some programs or levels may not be available each session.

Session 1 (AIM)	7:30/50 a.m. - 9:40/50 a.m.
Session 2 (course @ Braidwood/Coal City)	9:55 a.m. – 11:55 a.m.
Session 3 (other Romeoville courses)	12:26 p.m. - 2:26 p.m.

### **AUTO SERVICE I**

The two year auto service program, taught by ASE certified instructors, is designed to train students for entry-level automotive technician positions and/or preparation for post-secondary programs. Students' knowledge of measurement, estimation, and algebra, along with a technology course would be beneficial. First year students will develop skills in vehicle maintenance and repair including, brakes, steering and suspension, and will also learn the basics of electrical and engine performance (sensors). The curriculum follows the National Automotive Technicians Education Foundation (NATEF) format. This program will prepare students for the Automotive Service Excellence (ASE) certification exams. Students will be required to purchase tools, Wilco work shirt, safety glasses, and nitrile gloves. **Estimated cost of participation is \$50.00.** *Guidance Notes: 70% of time in lab, assignment and test for each area/chapter.*

### **AUTO SERVICE II**

Second year students will continue their training in electrical and engine performance after successful completion of Auto Service I. Students will be completing labs involving diagnosing electrical circuits, sensors, drivability problems, check engine lights, and emission related problems. Upon completion of this two year course, students may earn college credit towards Nashville- Auto Diesel or Joliet Junior College. Students are encouraged to continue their training through an appropriate technical school, college, or university. The curriculum follows the National Automotive Technicians Education Foundation (NATEF) format. This program will prepare students for the Automotive Service Excellence (ASE) certification. Assuming students continue to have their tools, safety glasses, work shirt, and nitrile gloves there will be no additional fees but replacement items will be available if needed. Dual credit may be available through **Joliet Junior College: AS106** (3 credit hours). *Guidance Notes: 70% of time in lab, assignment and test for each area/chapter.*

### **BUSINESS LOGISTICS**

This course is a dual credit course offered in partnership with Joliet Junior College. Specifically, this program emphasizes the essentials of supply chain and operations management, the transportation and distribution process, cargo security compliance, import/export fundamentals as well as the professional business and communication skills required to excel in the field. The course includes a sequence of five classes: **Transportation and Physical Distribution (TWL100/ 3credit hours), Introduction to Supply Chain Management (TWL 110/ 3 credit hours), Introduction to Import/Export (TWL120/ 3 credit hours), and Principles to Operations Management (TWL 130 / 3 credit hours), and Transportation and Cargo Security (TWL 140/ 2 credit hours)** for a total of 14 credit hours. **It is open to juniors or seniors; however, to complete the certificate and participate in the internship program, students must begin the program during their junior year.** Students may enroll in a qualifying course concurrently at their home school to meet the additional business course needed to complete the sequence.

### **COMPUTER TECHNOLOGY I**

This one year course is made up of the following components which may allow the student to receive college credits from Joliet Junior College.

**Computing Information Systems Fundamentals:** A first course for business or computer information systems majors planning to transfer to a four-year institution. A complete introductory study of information systems, computer programming and application software is presented. Course topics include the elements of a business computer system, system analysis and design, computer-to-mainframe systems, and program design and implementation. Also



included will be an introduction to the Internet and its uses, computer applications software and BASIC programming. The class meets in a PC-equipped classroom. **JJC Dual Credit: OFS 214**, 4 credit hours.

**Data Communications and Networking:** This course discusses the basic concept of Local Area Networking. Topics include networking overview, sharing computer resources, using email, using file servers, protocols, different networking software, how to manage your network, and an introduction to Wide Area Network. Students in this course are dual enrolled with **Joliet Junior College: CIS145**, 3 credit hours.

**A+ Guide to Managing and Maintaining Your PC:** This course investigates the hardware components of the personal computer. Heavy emphasis is placed on diagnosing and maintaining the PC. Students will learn to install and replace the major hardware component of the system. The students will learn to work the BIOS/CMOS, as well as what it takes to build a PC. This is the first course in preparation for taking the current A+ exam. Students in this course are dual enrolled with **Joliet Junior College: CIS275**, 4 credit hours. *Guidance Notes: Weekly assignments, projects, and quiz. Heavy reading and lecture format.*

### **CONSTRUCTION, LANDSCAPE, AND SPORTS TURF MANAGEMENT**

Students will focus on the knowledge, hands-on skills, and work place skills applicable to construction. Major units of instruction include: personal safety, hand tools, power tools, blue print reading, surveying, construction, landscaping, turf management and business. Construction skills will include: carpentry, plumbing, electricity, concrete, block laying, drywall and painting. Components of landscaping will include landscape design and hardscape. Turf grass production and management will be instructed as applied to build and maintain a golf course at Wilco. In addition, business units will cover calculating prices for work, managing a business, advertising, and sales. Careers such as agricultural engineers, carpenter, plumber, electrician, concrete and block layers, finishers, safety specialists, landscape design, turf management, and other related occupations will be examined. Improving workplace and computer skills will be a focus along with participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects which is seen as an integral course component for leadership development, career exploration and reinforcement of academic concepts. **JJC dual credit pending: AEC100 and AEC 112**, (4 credit hours). *Guidance Note: Recommended that students have earned a 'C' or higher in Geometry.*

### **CULINARY ARTS I**

Students have the opportunity to build interest and master essential hands-on culinary techniques and theoretical academics for a career in the Hospitality Industry. The ProStart Program I & II is sponsored by the National Restaurant Association Educational Foundation and is an accelerated curriculum which is followed for Culinary Arts I students (taught in the first year of the program). Coursework topics include, but are not limited to: Foodservice History, Sanitation & Safety; Equipment Usage; Basic & Technological Aspects in Foodservice Preparation; Nutrition; Classical Cooking; Ordering, Purchasing, Receiving & Inventory Controls; Workplace Math & Accounting; Introduction to Lodging & Tourism; Workplace Skills in securing employment and in Customer Relations; Career and Technical Ethics. Students will be directly involved in all aspects of a commercial kitchen operation. Students will participate in at least 10 hours per semester of outside community service (not including field trips), as offered by the instructor. Permitted field trips are offered during and outside of the required class activities and are instrumental to education within the Hospitality Industry. Students will also have an opportunity to use their culinary and leadership skills through participation in FCCLA, ProStart, and/or SkillsUSA student organizations. Additional opportunities are made available for dual college credits, articulated college credits, and scholarship availability with completed coursework requirements. Foods I is recommended for participation in the class. Upon successful completion of this program and *Placement tests*, students may earn credit from **Joliet Junior College: CA105 and CA106**, (5 credit hours). **Estimated cost of participation is \$50.00.** *Guidance Notes: 60% of time in lab. Weekly assignments and quiz. Emphasis on mathematics at the Algebra level. Certifications may include:* State of Illinois sanitation certification, Illinois Restaurant and the National Restaurant Associations' certifications, and ServSafe manager sanitation certification.

### **CULINARY ARTS II: Hospitality Careers and Event Planning**

This course is designed to help students develop outstanding customer service skills. Students will learn how to interact with customers, resolve conflicts, understand the importance of customer satisfaction/retention, actively participate as a member of a team, and develop time management skills. In addition, students will develop the skills needed to become a successful event managers. Students will learn how to design, plan, market, and stage an event. Field trips to various restaurants and event centers will be utilized to reinforce concepts. Staffing, risk management, event evaluation, legal and financial concerns will also be addressed. Students must have successfully completed Culinary Arts I at Wilco or Foods I and II at their home school to participate. **JJC dual credit pending: Hosp 110 and Hosp 148** (6 credits hours) *Guidance Notes: 60% of time in lab. Weekly assignments and quiz. Emphasis on mathematics at the Algebra level.*

### **EMERGENCY MEDICAL SERVICES**

Students who enroll in the emergency medical technician program must have successfully completed the first year of **Fire Science or Introduction to Health Professions** with an 80%/B or better or have completed three years of

science with a 'B' or better. The year will focus on preparing students for the multiple career areas related to the Fire Service/Health Care fields. Students will focus on the care, handling, and extrication of the critically ill and injured. Topics will include airway management, patient assessment, vital signs, cardiopulmonary resuscitation, lifting and moving patients, documentation, communication, pharmacology and cardiac emergencies. A heavy emphasis will be put on medical terminology. The EMT-B programs requires students spend sixteen hours off-campus in a hospital emergency room and twenty-four hours of ambulance ride-time in addition to the classroom. Students who successfully complete the course may take the EMT-Basic exam. Dual Credit available through **College of DuPage** with compliance with department requirements including COMPASS placement or an ACT composite of 20: **FIRE2271**, 10 credit hours. **Estimated cost of participation is \$100 plus \$20 for the State Exam.** *Guidance Notes: 30% of time in lab. Heavy emphasis on medical terminology and human anatomy.* **Certifications may include:** American Heart Association Health Care Provider CPR and EMT-B License

### **FIRE SCIENCE**

Fire Science will follow the curriculum set forth by the State of Illinois Fire Marshall's Office, the Illinois Department of Health, and the Department of Transportation. Students will learn through classroom and guided activities the essentials of firefighting which will include: fire chemistry, building construction, wearing personal protective clothing, identifying ropes, tying knots, using fire extinguishers, performing forcible entry, carrying and raising ladders, operating self-contained breathing apparatus, and auto extrication. Students will learn how to employ search and rescue techniques with ventilation tools and practice hose evolutions on an operating engine, all in a safe environment. Students will learn about equipment and assessment used to stabilize victims before the arrival of an ambulance. Dual credit available through the **College of DuPage and JJC: FIRE1100, and 2283/FIRE 101 and EMS 101**, 7 credit hours. **Certifications may include:** First Responder and American Heart Association Health Care Provider CPR **Expected cost of participation is \$75.00.** *Guidance Notes: 50% of time in lab. Emphasis on physical fitness, reading comprehension and basic math.*

### **GAME DESIGN**

This course introduces students to game design, theory, and game programming. Topics will include analyzing game genres, gameplay, artificial intelligence, storytelling, level design, and play testing. Students will design and write a simple game and design document, much like what is used in the profession. In addition, an introduction to computer programming in the BASIC language will teach students problem analysis, program design and programming in QBASIC language. Students will use a PC-based programming environment. In second semester, students will be introduced to the development of computer and video games. Students will learn how to design and implement 2D games using game engines. Dual credit may be available through **JJC: GAME 200** (3 credit hours).

### **INTRODUCTION TO HEALTH PROFESSIONS (may be offered at Braidwood High School dependent on enrollment)**

This course is an overview of the health care industry, including medical ethics and law, trends in health care, and exploration of career options. It includes an introduction to medical terminology, anatomy and physiology, vital sign measurement, math for conversions, standard precautions training, basic cardiac life support skills and first aid. The goal of the course is to assist students in making an informed choice about health care occupations and learn basic skills related to all facets of the health care industry. Dual credit available through the **College of DuPage: Health Sciences 1100 and 1110** (5 credit hours). **Certification may include:** American Heart Association Health Care Provider CPR. Course may be offered at Braidwood, dependent on enrollment.

### **MEDICAL ASSISTING**

The Medical Assisting program is designed for **seniors** to prepare students for a career as member of a multidisciplinary health care team within an outpatient care setting. Students develop the skills necessary to perform entry-level administrative and clinical procedures. Students will learn patient care techniques and functional anatomy and physiology with medical terminology along with some diagnostic and specialty procedures. The position of an MA in the workplace focuses on the medical care of the patient, as well as the administrative work which differs from a CNA as a CNA tends to take the role of caregiver to patients as well as help patients with medical needs. CNA's often serve patients who need long term care and in need of help with basic hygiene maintenance. A CNA will also tend to all bedside care of the elderly and can work in hospitals and nursing homes. MA's will administer injections, medications, and take the patient's health information. MA's will often perform office tasks as well as medical. They may gather patient's information as they check in to be seen, and collect all insurance information from the patient. **Dual credit pending with Joliet Junior College, MA 102**, (4 credit hours). Students must place into ENG 101 and MATH 094 to be eligible for dual credit. Certification may include: American Heart Association Health Care Provider CPR.

### **VETERINARY ASSISTANT**

Students learn animal science and the care of animals, including the fundamentals of companion animal species and breeds, behavior and training, animal anatomy and physiology, nutrition, and safety. This course will develop students' understanding of animal reproduction, animal ethics and welfare issues, animal health, veterinary medicine, veterinary

office practices, and animal services to humans. Students develop basic skills and techniques for assisting the veterinarian/technician in the following areas: handling large and small animals, grooming animals/caring for coats, feeding animals, and maintaining equipment and facilities. Career exploration will focus on veterinarian, veterinary lab technicians, office lab assistant small animal production, research lab assistant, and animal nutrition lab technician. Since FFA and Supervised Agricultural Experience Programs (SAEPs) are integral components of this course, students are required to maintain SAEP's, and be a member of the FFA while participating in activities for the FFA organization. Students will be encouraged to volunteer at local veterinary offices and/or animal shelters. **Dual credit available through Joliet Junior College: ACRI 119 (3 credit hours). There is a student fee of \$30 for this course.**

### **WELDING AND FABRICATION I**

The students will learn to perform welds using all positions. The students' ability to operate, adjust, and safely control power sources and gas equipment is essential. Students will learn how to braze weld, gas weld, shielded metal arc weld, mig weld, gas cutting, and plasma arc cutting. Blueprint reading and the use of weld symbols are also stressed. Students will learn to be a combination welder and work toward certification. Upon completion of this course a student may earn college credits through Joliet Junior College. Students are required to purchase necessary tools and safety clothing. **Estimated cost of participation is \$90.00.** Proficiency credit may be available through **Joliet Junior College: WLDG 101, and WLDG 110**, (6 credit hours). *Guidance Notes: 70% of time in lab. Weekly assignments and quiz.*

### **WELDING AND FABRICATION II**

This course will emphasize development of advanced skills in metal arc welding, brazing, and flame-cutting. Instruction will include safety practices, properties of metals, electrical principles, and advanced welding methods and equipment. Students will utilize MIG, TIG, and semi-automatic equipment to complete their various projects and activities. The development of employability skills, as well as transition skills, and vocational ethics, will be included in the course. Proficiency credit may be available through **Joliet Junior College: WLDG 120**, (3 credit hours). *Guidance Notes: 70% of time in lab. Weekly assignments and quiz.*

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**The following courses are offered at “other” locations (transportation not provided):**

### **ACE: ARCHITECTURE, CONSTRUCTION MANAGEMENT, AND ENGINEERING- SENIORS must provide their own transportation to JJC**

The ACE program is designed to provide seniors with a broad overview of the skills and knowledge necessary to pursue an exciting career in the architecture/construction/ engineering field. Through relevant and challenging college courses, the student will receive a solid foundation in the introductory and fundamental coursework in the professional tracks of the building industry. The ACE program had been designed for those students interested in the built environment and who are considering career pathways in the field of architecture, engineering or construction management. With 12 hours of college credit to be earned, the student will explore each discipline and can apply those credits to the track best suited to their interest for further study. **Students will need their own transportation to and from class at Joliet Junior College Main Campus.** They will be dual enrolled earning high school and college credit for **ARCH 100, CM 100, EGR 105/AEC 299, AEC 106, OPS 111, and SET 100**, a total of 12 credit hours. *Guidance Note: Recommended that students have earned a 'C' or higher in all mathematics courses and have achieved senior status.*

### **AIM: ADVANCED INTEGRATED MANUFACTURING (1<sup>st</sup> session - SENIORS must provide their own transportation to JJC)**

This senior only program is offered in partnership with **Joliet Junior College** and will be held at Main Campus on Hoboult Rd, Joliet, IL. Students will participate in four separate college courses building skills and awareness in heating, ventilation, and air conditioning, industrial maintenance, basic wiring/circuit design, and industrial fluid power. Students will learn about OSHA safety programs, maintenance physics, hand and power tools, precision measuring, technical diagrams and assembly prints, fastening devices, lubrication, basic pump operation, and basic pipefitting procedures. Students will study the principles of hydraulics and pneumatics as applied to the basic theory of fluids and typical industrial circuits. Students will build fluid power circuits as applied to industrial applications. Next, the fundamentals of electrical and electronic circuits, including the calculation and measurement of voltage, current, resistance and power will be instructed with emphasis placed on safe meter usage, print reading and exposure to a variety of electrical technologies currently used in industry. Topics include: introductory residential wiring, operation of AC motors, industrial solid-state devices, variable frequency drives, industrial controls, and single-phase/three-phase power distribution along with skills necessary to safely use electronic test equipment on low- and high-voltage components, the course will introduce students to the installation, service, troubleshooting, and repairs on various types of electrical controls, circuits and components. **Students will need their own transportation to and from class. Students must submit an application to the Technical Department at Joliet Junior College. Students will be dual enrolled earning high school and college**

**credit: IMT101, IMT121, EEAS111, and EEAS101, 13 credits.** *Guidance Notes: Solid math skills needed with record of good attendance and behavior.*

**AVIATION MECHANICS This is a Early Bird Class from 7:30-9:30 am.**

This **senior** only course is offered in partnership with Lewis University. Students will participate in a blended learning environment: completing classroom assignments online at Wilco Area Career Center and lab assignments at Lewis University. Fall Semester students will take **AVMT-10600 Aviation Fundamentals** (4 credit hours) where students will learn about aerodynamics, aircraft design, stability, control, Federal Aviation Administration regulations and publications, weight and balance and ground handling of aircraft. 90 contact hours (60 lecture/30 lab). Meets requirements of 14 CFR 147. Spring Semester Students will take **AVMT-11000 Aircraft Structures I** (4 credit hours) where the focus of the course will be riveting and sheet metal repair, including aluminum, forming and layout and oxyacetylene welding operation. Corrosion and corrosion control are also studies. 180 contact hours (60 lecture/120 lab). Meets requirements of 14CFR 147. Students selected for enrollment in college-level courses must have appropriate academic qualifications which include: minimum 3.0 GPA, Algebra I and II with a grade of C or higher, Physics with a grade of C or higher, and a high level of motivation, and adequate time to devote to studying a college-level course.

**BARBERING-Students must provide their own transportation**

This is a 13 month program for seniors or a 2 year program for juniors in Barbering. The barbering program is offered at Champions Beauty and Barber University in Crest Hill, IL which is an approved and licensed school by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and has meet all state and federal regulations. This course offers students curriculum in both theory and practice in the following areas as they relate to the practice of barber science and art: anatomy; physiology; skin diseases; hygiene and sanitation; barber history; barber law; hair cutting and styling; shaving, shampooing, and permanent waving; massaging; and barber implements as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will also include advanced theoretical and practical skill development building to the 1500 hours of study needed in barbering and to prepare students for the barbering license exam. **Students must have their own transportation and pay additional tuition to Champions Beauty and Barber University, estimated cost is \$3,900 to \$2,500 depending on the 13 month or 2 year.** **Certifications:** Program completion allows students to sit for the Illinois Department of Public Health Barbering license.

**HEAVY EQUIPMENT TECHNOLOGY (SENIORS must provide their own transportation to Local 150)**

The heavy equipment technology program is designed to train students for careers as heavy equipment mechanics and is a senior only program. Heavy equipment includes: cranes, bulldozers, frontend loaders, rollers, backhoes, and hoists. Emphasis will be on the fundamentals as it relates to diesel engines and fuel systems used in heavy equipment. The program will introduce students to units of measurement, electron theory, wiring diagrams, schematics and symbols, basic principles of hydraulics, basic engine components, intake and exhausts systems, introduction of welding and power train functions. This off-campus class is available through an application process only. Students must be willing to participate in drug testing and meet attendance, behavior, and grade requirements. The class will be located at ASIP-Local 150 in Wilmington. **Students must provide their own transportation daily to the Wilmington site.** Students have an opportunity to earn dual credit from **Joliet Junior College: OPS111**. Students must have steel toed boots and purchase program shirts at an estimated cost of \$45.00.

**COSMETOLOGY (students must provide their own transportation to Franklin Cosmetology School in Morris)**

This off-campus course is open to students to attend a state-approved school of beauty culture. The professional school will provide the facility, instruction, and clinical training as prescribed by the Illinois Department of Public Health. **There is a substantial student fee for this course ranging from \$1,800 to \$7,500**, which varies by cosmetology school and is subject to change. **Students provide their own transportation.** Registration needs to be done by first year students in early January through a separate application process found online at [www.wilco.k12.il.us](http://www.wilco.k12.il.us). Students may select from four schools in Will/Grundy Counties: Professional Choice in Joliet, Franklin Institute in Morris, Champions Beauty and Barber University in Crest Hill, and Lemont Nail Inn and School of Cosmetology in Lemont. Professional Choice limits participation to seniors which start the program in July before their senior year. Cost and attendance times and dates vary per location. Please contact Wilco or the cosmetology school for more information. *Guidance Notes: Clinical assignments, workbook assignments, and task signoffs.* Emphasis on chemical reactions and human anatomy. **Certifications:** Program completion allows students to sit for the Illinois Department of Public Health Cosmetology license.

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**The following courses are offered in Braidwood (transportation MAY be provided dependent on enrollment):**

### **CERTIFIED NURSING ASSISTANT (this class is offered at Reed Custer High School)**

The Certified Nursing Assistant program is a **junior/senior** program structured to prepare the student for employment as a Certified Nurse Assistant. The curriculum includes all standards and procedures contained in the Illinois Department of Public Health Certified Nurse Aide Instruction Model. The State Nurse Aide Examination can be taken through this course with the completion of 40 hours of on-site clinical experience at a local nursing facility, included in the class structure if student has a social security number. **Students must have transportation to the clinical site, a physical, and TB test before September 15th. Before beginning the clinical experience, students must undergo a Health Care Worker criminal background check.** Throughout the semester, students must maintain an 80% to remain eligible for Joliet Junior College credit and Illinois Department of Public Health Certified Nurse Aide Exam. Many medical related college programs require clinical hours or specifically CAN certification before being admitted to the program. Upon completion of this course, students may choose to continue their education in preparation for any of a number of careers in the health care field i.e.; Registered Nurse, Physical Therapist, Respiratory Therapist, Ultrasound Technician, etc. Students are required to wear appropriate clothing at clinical site. Student may receive **Joliet Junior College credit for NA101**, 6 credit hours. **Estimated cost of participation is \$100 with an additional \$65 for the State CNA exam in the spring.** Guidance Notes: 30% of time in lab. Daily assignments and weekly tests. Emphasis on human anatomy. **Certifications may include:** American Heart Association Health Care Provider CPR and Certified Nursing Assistant License

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### **The following courses are offered in Coal City through GAVC (transportation MAY be provided dependent upon enrollment numbers):**

GAVC's programs are designed to offer students career-based courses providing skills required for employment upon completion. **There will be a \$100.00 enrollment fee attached to GAVC courses.**

#### **AGRICULTURE SCIENCE I (this class is offered at Coal City High School)**

In the Agriculture I class students will dive into the purpose, management, health and physiology of animals such as fish/marine life, chickens, cattle, pigs, goats, sheep, cats and dogs. Students will have opportunities to handle each animal, learn how to train them and keep some in the classroom/at the school farm as projects for the year. These projects will be treated as businesses, where students will make managerial decisions on the production and marketing of the products. Along with learning how to train and care for animas students will learn about the scientific and technological side of modern agriculture as it pertains to crops and animals. Students will also become more informed on the meat production, processing and marketing by studying food law during the semester. In the spring, students will maintain their animal projects as well as explore plant science concepts. Agriculture is incorporating more science and technology therefore, student will gain insight or these new concepts while applying them to traditional production methods. Students will be involved with the planting and harvesting of the plot.

#### **AGRICULTURE SCIENCE II (this class is offered at Coal City High School)**

In the Agriculture Science II class, students will continue and extend their SAE projects developed they in Ag Science I. Students will be required to keep a record book on their project. They will also be responsible for furthering their research and creating a more challenging project during this class. Students will study Agriculture Business and its many areas of focus including greenhouse management, floral design, veterinarian technology, and biological sciences.

#### **CRIMINAL JUSTICE/LAW ENFORCEMENT I (this class is offered at Coal City High School)**

Students will be educated in a wide range of criminal justice topics such as law enforcement, corrections, parole, probation, court system, security management, current legal issues, terrorism, as well as other related areas of our criminal justice system. The purpose of the course is to provide students with basic information to understand our criminal justice system and/or to pursue a career in the criminal justice field, both public and private. This program is a blend between traditional teaching methods and strategies, as well as hands-on/skill related activities. Local criminal justice professionals give specialized presentations and field trips are taken to local criminal justice facilities.

#### **EARLY CHILDHOOD EDUCATION I (this class is offered at Coal City Early Childhood Center)**

First year students will receive an introduction to child development principles, developmentally appropriate learning environments, curriculum development, health, safety, and nutrition in regards to early childhood education. Students are also exposed to special education topics such as: IEP's, disabilities in the classroom, RTI, and inclusion. While enrolled in Early Childhood, the students will begin the process of learning the importance of lesson plans and how to create lesson plans for the different curriculum areas found in the early childhood setting. The students will be offered off-campus clinical rotation in their home-school community after the first 7-8 weeks. This clinical experience\*, in conjunction with our class time, will be three days a week and provide hands-on training during the course of the school year. At the conclusion of the year, the students that meet the requirements will be awarded a Level I certification through INCCRRA/

Illinois Gateways to Opportunity. **Students must have a current physical with a T.B. skin test, driver's license, and transportation for clinical experiences.**

**CRIMINAL JUSTICE/LAW ENFORCEMENT II (this class is offered at Coal City High School)**

Prerequisite: Successful completion of Criminal Justice I with a "C" or better. Criminal Justice II will continue to reinforce and enhance the knowledge and skills learned from Criminal Justice I. In addition, Criminal Law, White Collar Crime, and Drug Use and Abuse in the Criminal Justice System will be studied. Students may be afforded the opportunity to participate in a job shadow program with a local law enforcement/criminal justice agency. This program is a blend between traditional teaching methods and strategies, as well as hands-on/skill related activities. Local criminal justice professionals give specialized presentations and field trips are taken to local criminal justice facilities.

**EARLY CHILDHOOD EDUCATION II (this class is offered at Coal City Early Childhood Center)**

Prerequisite: Successful completion of Early Childhood I, with a C grade or better. The Early Childhood II program is available to those returning seniors who wish to continue exploring the components of education from birth to age eight. Topics discussed throughout the second year include the history and philosophy of early childhood education, child guidance and observation, diversity issues, and portfolio development. They will also learn to write detailed plans as well as discuss common core standards in order to implement those lessons while attending clinical. Students will participate in off-campus clinical experiences in the student's home community by assisting at local public schools, preschools, or childcare facilities. Upon completion of the second year, students will receive three hours of articulation from Joliet Junior College if the attend Joliet Junior College upon graduation from high school. **Students must have a current physical with a T.B. skin test, driver's license, and transportation for clinical experiences.**



For more information on dual credit agreements with Joliet Junior College, please

The Wilco Area Career Center provides equal employment opportunities for all persons, and equal educational opportunities for all students, without regard to race, color, religion, creed, national origin, gender, age, ancestry, physical or mental handicap or disability, or other characteristics protected by law.