

# COURSE DESCRIPTION GUIDE 2020-2021

## CARBONDALE COMMUNITY HIGH SCHOOL

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Principal: Ryan Thomas  
Director of Special Education: Mandy McKee  
Director of Curriculum & Instruction: Ethan Graham  
Assistant Principal: Terica Doyle  
Assistant Principal: Gwen Poore  
Dean of Students: Alejandro Ruiz

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### INTRODUCTION

The Course Description Guide provides an overview of courses offered, as well as, information related to successfully navigating high school and preparing for college and career endeavors. Carbondale Community High School offers a comprehensive curriculum designed to serve students' needs. Students are urged to discuss their career plans with parents, counselors, and teachers based on a realistic self-assessment of their interests and academic abilities. Counselors are available to facilitate this process and help plan a four year program of study tailored to meet the individual needs of each student. Students and parents are encouraged to read the Counseling Information and Course Description sections very carefully.

The Course Description Guide is available on the CCHS website: [www.cchs165.jacksn.k12.il.us](http://www.cchs165.jacksn.k12.il.us). A hard copy may be obtained from the Counseling Department if needed.

### COUNSELING DEPARTMENT

Counselor, Class of 2021: Krista Antrim (Ext 206)  
Counselor, Class of 2022: Brenda Krutsinger (Ext 264)  
Counselor, Class of 2023: Lori Koester (Ext 216)  
Counselor, Class of 2024: Franciene Sabens (Ext 224)  
College & Career Counselor: Erinn Murphy (Ext 228)  
School Social Worker: Amy Prudencio (Ext 217)  
Counseling Department Secretary: Brittany DeVantier (Ext 226)  
Registrar: Mindy Clark (Ext 227)

# COUNSELING INFORMATION

## MINIMUM GRADUATION REQUIREMENTS

### CLASSES OF 2021-2022-2023-2024

1. English 4 credits
2. US History (1 credit) - Junior year
3. American Government (½ credit) - Senior year
4. Civics (½ credit) – Senior year
5. Mathematics (3 credits, including Algebra 1 and Geometry content)
6. Science (2 credits)
7. Consumer Education - (½ credit) – One of the following classes: *Adult Living*, *Personal Finance*, or *Interrelated Co-Op*.
8. Health (½ credit, one semester) – Freshman year
9. Physical Education - Students must take physical education every semester; waivers may be applicable. See Physical Education.
10. Music, Art, Foreign Language, Business, Family and Consumer Science, Industrial Technology or Career Education (1 credit required).
11. Nineteen (19) credits are required for graduation, including physical education.
12. Students who score below the 55th percentile in Reading on the 8<sup>th</sup> grade *PSAT* may be **required** to take a Reading Lab class at the 9th grade level. A placement team consisting of representatives from the student's feeder school and CCHS will determine the appropriateness of each student's placement.
13. Students may be **required** to take the AT mathematics support class in conjunction with Algebra I, pending placement team determination.

## CREDIT POLICY

1. A passing grade in both semesters of a full year course equals one credit; A passing grade in one semester equals ½ credit. Driver Education classes earn ¼ credit.
2. If a student fails one semester of a math class and it is not made up in credit recovery, it is strongly recommended that both semesters be repeated. Math classes are designed to be sequential, and it is necessary to complete both semesters in order to acquire the skills and knowledge necessary to advance to the next math level. See your counselor or math teacher for assistance with this determination. Duplicate credit will not be given for a previously passed class.
3. All credits earned in a school approved by an appropriate state agency or accrediting agency will be accepted for transfer. All credits earned in other schools and submitted for transfer shall be subject to administrative review and approval. No college classes will be accepted for high school credit.
4. A student must attend CCHS the last semester prior to graduation from CCHS.
5. A student cannot take more than one no-credit class per day (i.e. Study hall, Teacher Assistant).
6. No honors credit will be awarded for Independent Study classes.
7. Honors credit points are awarded for all passing grades earned in honors classes for a maximum of eleven (22 semester-hours) honors credits per student. Students may take additional honors classes but will not receive honors credit points beyond eleven credits. If a student is recommended for an honors class, the student may decline the recommendation. There are no honors classes taught at the freshman level and no honors credit is awarded to any student for honors classes taken during the freshman year except as described in #9 below.
8. Only three honors credits are available in mathematics.
9. Freshmen can enroll in, and eventually receive honors credit for course work in honors mathematics. Students who elect this approach are still limited to three mathematics honors credits. The honors credit for mathematics courses taken during the freshman year will be added to a student's GPA when a student completes the mathematics sequence of classes (Honors AP Calculus). The honors credit earned in prior semesters will be included in a student's GPA.
10. The freshman and sophomore years of English are specifically designed to build reading and intensive writing skills. The third year of English is American Literature, which includes an emphasis on intensive research writing, a vital building block to the broader range of writing in the senior year and any college writing ahead. To meet the English graduation requirement, all students must successfully complete English 1, 2, 3, & 4.

## COLLEGE ADMISSIONS REQUIREMENTS

Students are responsible for meeting the entrance requirements of colleges and universities that they wish to attend. Since admissions standards vary widely from school to school, it is imperative that students and parents become informed about each school's standards relating to test scores, grades, and high school course selection when choosing a school. Sometimes different admissions standards exist within one university or college, depending on the major the student wants to study. **Careful planning for college includes early contact with all potential colleges regarding specific admission standards.** Counselors introduce post-secondary planning beginning in the 9<sup>th</sup> grade. This is done through group and individual lessons and meetings and the introduction of the Naviance platform. Students are encouraged to use Naviance regularly for college and career research and decision making.

**4-YEAR COLLEGE PREPARATION:** A college preparation program can be recommended which should satisfy basic admission requirements at most colleges and universities. Below is the required course pattern for admission to many Illinois public universities:

4 credits of English  
3-4 credits of Mathematics (Beginning with Algebra I)  
3-4 credits of Science (Biology, Chemistry, Physics – recommended sequence)  
3+ credits of Social Studies  
2 or more years of a World Language  
2 or more elective credits (Music, Art, or Career & Technical Education)

**FAILURE TO MEET ADMISSION REQUIREMENTS:** In some cases a student who does not satisfy a college's admissions requirements may be admitted on a provisional basis. This is solely dependent on each college's policy concerning taking additional basic courses.

#### **NCAA ELIGIBILITY REQUIREMENTS FOR ATHLETICS**

Students who plan to participate in athletics at Division I and II institutions must meet the NCAA requirements. Division I Full Qualifier requirements include successful completion of **16 core** courses with at least a **2.3 GPA** in those core courses. **Ten of the 16** core courses must be completed by the end of the student's junior year. ACT and/or SAT scores are also taken into consideration for eligibility (See the Sliding Scale online at the NCAA Eligibility Center). Division II also requires 16 core courses with at least a 2.0 GPA (for Class 2017). Beginning with the Class of 2018, students will need a 2.2 GPA (for DII). These requirements may change from time-to-time; therefore it is important to check the NCAA website [www.eligibilitycenter.org/](http://www.eligibilitycenter.org/) for current requirements. Students should register with the NCAA Eligibility Center by their **Junior** year. Talk with your coach and/or the athletic director, for current requirements. A list of current NCAA approved, CCHS core classes, can be found on pages 35-36.

#### **COURSE SELECTION PROCEDURE**

During second semester, students will meet with their counselor to select classes indicating their choice of subjects for the next school year. Some required classes may be pre-determined. Electives should be made based on interest, aptitude, and future plans. Classes are scheduled based on student requests, teacher recommendations and the availability of sections.

#### **SCHEDULE CHANGES**

Since considerable time is devoted to the selection of courses offered each year, changes in course requests will not be granted for any of the following reasons: 1) to change teachers; 2) to change assigned lunch; 3) to be with friends. Occasionally, scheduling problems develop, such as conflicts between classes or actual scheduling errors. These types of schedule changes, being administrative in nature, will be made. *Any first semester schedule changes from the planned course requests must be made in writing before the first day of attendance. To drop or add a class, you must complete and return a Schedule Change Request Form to the Counseling Office by the advertised deadline. Second semester changes must be made by the advertised deadline date in December. There will be no schedule changes after the semester begins, other than those that are administrative in nature or as requested by a teacher.*

#### **COUNSELING APPOINTMENTS**

Unless it is an emergency, students can request to meet with his or her counselor before school, after school or during each lunch period. NO passes will be given to students who are late to class because they were making a counseling appointment. The Counseling Department follows a counselor on call schedule each day in order to attend to emergencies and urgent student needs.

#### **INDEPENDENT STUDY**

Independent study courses are available on a departmental basis if a student has completed the highest level of course work in that department. **SENIORS ONLY** are eligible for independent study. Honors credit is not available. All independent study courses must be pre-approved by the cooperating teacher, department chair, counseling department chair and/or principal.

#### **TEACHING ASSISTANTSHIP**

A teaching assistantship is a non-credit class, for **SENIORS ONLY**, which must be pre-approved by the cooperating teacher and an assistant principal. Teachers are limited to one teaching assistant per semester, unless otherwise requested.

#### **PROFICIENCY/PLACEMENT CREDIT POLICY**

Proficiency exams may be given for appropriate placement in world language, mathematics and CTE classes. No credit is given for the lower level course that is passed by proficiency, unless otherwise determined by administration. Proficiency exams or projects are not allowed as waivers for courses required for graduation.

## CORRESPONDENCE COURSES

Students interested in correspondence courses at CCHS must receive prior approval from the building principal. Only correspondence courses accredited by the North Central Association of Schools and Colleges or other comparable regional accrediting associations will be accepted for credit toward graduation. Registration for a correspondence course will be limited to a senior who has a full schedule and needs an additional course to meet graduation requirements or a student who has completed the course sequence offered at CCHS. A student may use a maximum of one correspondence credit toward graduation.

## DUAL CREDIT

Several courses at CCHS have been articulated for dual credit with John A. Logan College. Junior and senior students will receive both high school and college credits for these classes, if they meet the minimum requirements. Underclassmen, who are planning to take a dual credit class, must complete a brief essay indicating why they are requesting the class, how they plan to be successful, and why they should receive the dual credit. They must also submit two (teacher) letters of recommendations. A Dual Credit Enrollment form must be completed by all dual credit students. Students must take the Accuplacer, ACT, or SAT exam. Students should see the Dual Credit Coordinator for assistance.

**Dual Credit Classes include:** American Sign Language, AP/Honors Environmental Science, Art Appreciation, Automotive, Ceramics, Certified Nursing Assistant (CNA), Electrical Trades, Introduction to Statistics, Contemporary Math, Medical Terminology, Spanish 3, Spanish 4, AP Spanish 4, English 4 – Tech Writing, and Welding. Dual credit classes are taught on the CCHS campus with the exception of Automotive, American Sign Language, and Welding.

## DUAL ENROLLMENT IN COLLEGE COURSES

Concurrent enrollment in college classes is an acceleration and enrichment experience for academically capable students who have completed their sophomore year. Students must be approved for admission by the JALC or SIUC Admissions Office. Guidelines for this enrollment are as follows:

1. A student must have at least a 2.75 GPA or administrative approval to qualify for the CCHS Dual Enrollment Program.
2. To enroll in classes at John A. Logan College, a student must complete a Dual Enrollment Registration form, arrange to take the Accuplacer, ACT, or SAT test, and request an official transcript be sent to the Dual Enrollment Coordinator at the college. Courses taken during the **fall** and **spring** semesters through the Dual Enrollment Program at John A. Logan are tuition free, up to eight credit hours. Students **must pay fees** if applicable, as well as, purchase any required books or supplies associated with each class.
3. Students can be released for up to, two class periods to take dual enrollment classes, if their schedule allows.
4. College courses taken during the school day must be from subject areas in which the student has completed all courses offered at CCHS. This does not apply to on-line or evening courses.
5. If taking a course at SIUC-C, the student must request a written permission to enroll letter from the principal, complete appropriate forms and have a transcript sent. **Students are responsible for their own tuition and fees** at SIUC-C. Students should provide a copy of their college schedule to the Curriculum Director.
6. High School credit will not be awarded for non-dual credit college courses taken while attending CCHS and the grade earned will not be computed in the student's GPA. SIUC and JALC will hold credits earned in escrow. A college transcript may be requested when applying to other colleges. Course equivalencies between colleges can be found at <https://www.transfer.org/>.

## HONORS CLASSES

CCHS offers a variety of classes that may be taken for honors credit. Each department has its own selection process for admitting students into their honors program. Students can take as many honors classes as they qualify for, but maximum of 11 honors credits (22 semesters) will be used to calculate a student's GPA. *Students enrolled in AP courses are required to take the AP exam in that subject, unless the course is dual credit.*

## REBOUND

A failed class that is required for graduation can be made up at Rebound during the summer, if the class is available. If a student has not made up the failed class before the semester in which the class was failed, the student must repeat the course at CCHS unless otherwise approved. Students can earn no more than 3 credits at Rebound for failed classes, while enrolled at CCHS. Rebound also provides an alternative for completing high school requirements for graduation and/or a GED.

Rebound Contact Information:

205 N Oakland Ave, Carbondale, IL 62901  
618-549-8232

**TERRIER TUTORING/CREDIT RECOVERY**

A tutoring and credit recovery program is offered after school on Tuesdays, Wednesdays and Thursdays, to assist students with academic improvement and credit recovery. Credit recovery requires a student who failed a required class to complete a minimum of 20 hours of work and pass the exit exam. If completed successfully, the student will receive a D in the course. One semester of credit recovery may also be offered during the summer to students who meet specific requirements in English, Algebra 1, Algebra 2, Geometry, IAG 1, IAG 2, IAG 3, US History, Government, and Biology.

**SUMMER SCHOOL**

Driver's Education may be offered during summer school. Students wanting to take summer driver's education should select the class during forecasting. To complete the registration process, the student must pay the summer school fee, or verify qualification of a fee waiver, in the Principal's Office by the pre-determined deadline. Enrollment in this class is based on a student's birth date (older students have priority), and the completion of the registration process in a timely manner. Summer school semesters are four weeks in length and generally begin during the first week of June. Regular attendance is crucial because each day of summer school is equivalent to two days of work during the regular school year. Students are responsible for their own transportation; limited bus service may be available for three of the four weeks of class.

**SUMMER ENRICHMENT PROGRAM**

The Summer Enrichment Program is a non-credit summer school opportunity for students to explore interests that otherwise might not be available to them. Enrichment and remedial classes are free and are offered in one and two week blocks. Students may register for classes on-line during the month of May. Contact Mrs. Doyle (x276) for more information.

**YOUR INDIVIDUALIZED  
FOUR-YEAR PLAN**

CCHS CLASS OF \_\_\_\_\_

NAME \_\_\_\_\_

CAREER GOAL \_\_\_\_\_

**FRESHMAN YEAR**

**Required:** English, Math, Science, Health, PE

EB \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

**\*START STRONG\***

**SOPHOMORE YEAR**

**Required:** English, Math, Science, PE

**Recommended:** Consumer Ed

EB \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

**\*CHOOSE WISELY\***

**JUNIOR YEAR**

**Required:** English, Math, US History, PE, Cons. Ed

**Recommended:** Science

EB \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

**\*DO YOUR BEST\***

**SENIOR YEAR**

**Required:** English, Government/Civics, PE, Cons. Ed

**Recommended:** Math, Science

EB \_\_\_\_\_

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

4 \_\_\_\_\_

5 \_\_\_\_\_

6 \_\_\_\_\_

**\* MAINTAIN RIGOR\***

***\*Consumer Education requirement must be completed in 10<sup>th</sup>, 11<sup>th</sup>, or 12<sup>th</sup> grade.***

Core classes in English, Math, Science, Social Studies and World Languages should be your focus depending on the selectivity of the colleges you are interested in and your goal to qualify as an NCAA athlete.

Fine Arts and Technology courses also meet specific college requirements depending on the school and your intended major.

Ask questions as you work so that you are choosing wisely for your future plans!

# COURSE OFFERINGS

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## **CTE - BUSINESS**

Accounting I, II  
CEO – Creating Entrepreneurial Opportunities  
Computer Applications  
Computer Operations and Programming I, II  
Cooperative Education  
Honors Computer Operations and Programming  
Marketing / Sports Marketing  
Multimedia Development I, II  
Personal Finance  
Tech for Success  
Web Page Design

## **CTE - FAMILY AND CONSUMER SCIENCE**

Adult Living  
Child Development  
Clothing & Textiles I, II  
Culinary Occupations I, II  
Fashion and Design  
Introduction to Family & Consumer Science (LIFE)  
Nutrition & Culinary Arts I, II  
Parenting

## **CTE - HEALTH OCCUPATIONS TECHNOLOGY**

~Certified Nurse's Assistant  
~Medical Terminology  
Orientation to Health Occupations

## **CTE - INDUSTRIAL TECHNOLOGY**

Architectural Design & Drafting I & II  
Beginning Drafting & Design  
Carpentry Exterior  
Carpentry Interior  
3-D Animation and Design I, & II  
~Electrical Trades I  
Electrical Trades II  
Engineering Design/Mechanical Drafting I&II  
Graphic Communications I & II  
Honors Architectural Design Drafting I&II  
Honors Engineering Design/Mechanical Drafting I&II  
Introduction to Technology and Engineering  
Principles of Technology I, II  
Robotics  
Small Engines

## **ENGLISH**

>English 1, 2, 3, 4  
>English 4 - Shakespeare  
>English 4 - Creative Writing  
English 4 – Graphic Novels  
English 4 – Journalism  
>English 4 – Themes in Contemporary Literature  
>English 4 - Themes in World Literature  
~English 4 - Technical English  
>Honors English 2, 3, 4

## **FINE ARTS – INSTRUMENTAL MUSIC**

Band, Competitive Band, & Honors Band  
Band (Percussion)  
Jazz Ensemble  
Marching Guard  
Beginning Guitar  
Advanced Strings  
Piano & Advanced Piano

## **FINE ARTS – VOCAL MUSIC**

Choir, Advanced Choir, & Advanced Honors Choir

## **FINE ARTS – VISUAL ARTS**

Fundamentals of Art  
Advanced Art  
Art Studio & Honors Art Studio  
~Art Appreciation  
Fundamentals of Ceramics  
Exploration of Ceramics  
~Ceramics  
Photography, & Advanced Photography

## **FINE ARTS – SPEECH AND THEATRE**

>Speech & Advanced Speech  
Theatre & Advanced Theatre

## **HEALTH & DRIVER EDUCATION**

Driver Education  
Health

## **MATHEMATICS**

>Accelerated Algebra I  
>Accelerated Geometry  
>Algebra I  
>Algebra II  
~Contemporary Math  
Transitions to Quantitative Literacy and Statistics  
>Geometry  
>Honors Algebra II  
>Honors/AP Calculus  
>Honors Geometry  
>Honors Pre-Calculus  
>Integrated Algebra/Geometry 1  
>IAG1 (Student Services)  
>Integrated Algebra/Geometry 2  
>IAG2 (Student Services)  
>Integrated Algebra/Geometry 3  
>IAG3 (Student Services)  
~>Introductory Statistics  
>Trigonometry/Analytic Geometry

**PHYSICAL EDUCATION**

Adventure/Outdoor Education  
 Personal Fitness  
 Freshman PE  
 Strength Training  
 Team Sports  
 Athletic PE Freshman Strength Training  
 Athletic PE Strength Training

**SCIENCE**

>Accelerated Biology  
 >Anatomy/Physiology  
 >Biology 1  
 >Biology 2 – Genetics  
 >Biology 2 – Microbiology  
   Botany & Agriculture Science I, II  
   >Chemistry I  
   Conservation Biology & Natural Resources Mgmt.  
 >Forensics  
   >Honors/AP Biology II  
 >Honors/AP Chemistry II  
 ~>Honors/AP Environmental Science  
 >Honors/AP Physics I  
 >Honors/AP Physics II  
 >Honors Biology 2-Microbiology  
 >Honors Chemistry I  
 >Physical/Earth Science  
 >Physics  
 >Principles of Technology I, II  
   Zoology/Vet Technology

**SOCIAL STUDIES**

>African American History  
 >American Government  
 >U.S. History  
 >Civics  
 >Human Geography  
 >Honors/AP Government  
 >Honors/AP United States History  
 >Honors/AP World History  
 >Sociology  
 >Psychology  
 >World Geography  
 >World History

**WORLD LANGUAGES**

~>American Sign Language I, II  
 >French 1,2,3,4 Honors 3, 4  
 >German 1,2,3,4 Honors 3, 4  
 ~(3,4)>Spanish 1,2,3,4 Honors 3,4, AP Spanish 4

**SUPPORTIVE INTERVENTIONS & READING**

Academic Support  
 Achievement through Technology I (AT) & II (AAT)  
 Other Supportive Interventions  
 Reading Lab 1A& 1B  
 Reading Lab 2  
 Transitional English (ESL)

**DUAL CREDIT CLASSES****Taught at CCHS**

~Art Appreciation  
 ~Ceramics  
 ~Certified Nursing Assistant (NAD 101)  
 ~Contemporary Math  
 ~Electrical Trades  
 ~English 4 – Technical Writing  
 ~>Honors AP Environmental Science  
 ~>Introductory Statistics  
 ~Medical Terminology  
 ~Music Appreciation  
 ~>Spanish III & IV, AP Spanish IV

**Taught at JALC**

~American Sign Language I&II (IPP141/IPP142)  
 ~Automotive /Braking systems (173)  
 ~Automotive /Engine Repair (170)  
 ~Automotive /Fuel & Exhaust Systems (171B)  
 ~Automotive /Ignition Systems (171A)  
 ~Automotive /Intro to Automotive Services (172)  
 ~Automotive /Suspension & Steering (281)  
 ~Welding /Acetylene Fusion Welding I (150)  
 ~Welding /M.I.G. Welding (160)  
 ~Welding /Oxy-Acetylene Fusion Welding II (151)  
 ~Welding /T.I.G. Welding (162)

> NCAA Approved Core Class

~ Indicates Dual Credit Class



# COURSE DESCRIPTIONS

(Some courses may not be offered every year for various reasons, see your counselor for details)

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## CAREER AND TECHNICAL EDUCATION

### CTE - BUSINESS

#### **Accounting I** Grades 10-12, Elective, Semester (548)

Accounting I is a course assists students pursuing a career in business, marketing, and management. This course includes planned learning experiences that develop initial and basic skills used in systematically computing, classifying, recording, verifying and maintaining numerical data involved in financial and product control records including the paying and receiving of money. Instruction includes information on keeping financial records, summarizing them for convenient interpretation, and analyzing them to provide assistance to management for decision making.

#### **Accounting II** Grades 10-12, Elective, Semester (549)

*Prerequisite: —C or better in Accounting I.*

Accounting II is a course that builds upon the foundation established in Accounting I. This course is planned to help students to develop deeper knowledge of the principles of accounting with more emphasis being placed on financial statements and accounting records. It is a study of previously learned principles as they apply to the more complicated types of business organizations: partnerships, corporations, branches, etc. The students may become familiar with such specialized fields of accounting as cost accounting, tax accounting, payroll accounting, and others. Some students may choose to do specialized accounting computer applications, and others may elect payroll clerk, data processing computer applications. Simulated business conditions may be provided through the use of practice sets. Skills are developed in the entry, retrieval, and statistical analysis of business data using computers for accounting business applications.

#### **CEO Creating Entrepreneurial Opportunities** Grades 11-12, Elective, 2 periods- EB & 1<sup>st</sup> hour, off Campus, full year (544)

This course covers the basics of conceptualizing, starting, and running a small business. Concepts, such as supply and demand, cost/benefit analysis, competitive advantage, and opportunity recognition, will be covered. In addition, coursework will include: innovative thinking strategies, product development, business structure, marketing, financial strategies, and record keeping. Students will work in teams to create business plans. Skills such as preparing an income statement, balance sheet, income and cash flow statements will also be taught. Entrepreneurial thinking (outside-the-box problem solving) will be utilized throughout the course. Various business owners from Jackson County will be invited into the class in the role of either guest speaker or as business consults to advise the students. Students will have opportunities for job shadowing and business mentor relationships. Students will present their business plans to an advisory team.

#### **Computer Applications** Grades 9-12, Elective, Semester (516)

*Prerequisite: Tech for Success*

Computer Concepts and Software Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

#### **Computer Operations and Programming I** Grades 9-12, Elective, Semester (517)

*Prerequisite: Tech for Success*

Computer Operations and Programming I is the first of two skill-level courses designed to develop computational thinking. Students will be exposed to the fundamentals of problem solving, programming and game design. Instruction will include basic programming tools to produce code that includes data types, strings, operations, loops, classes, arrays, methods and objects that are common to many object oriented programming languages. Students will use Scratch and Python to apply what they learn to create programs and games.

#### **Computer Operations and Programming II** Grades 10-12, Elective, Semester (581)

*Prerequisite: Computer Operations & Programming I.*

Computer Operations and Programming II is a skill-level course for students who have completed Computer Operations and Programming I. Students will use JAVA to focus on Android App development for mobile platforms as well more advanced Game Design. Students will be able to write, compile, run, test, debug and modify programs and applications that solve real world problems.

**Cooperative Education** Grade 12, Elective, Full year (674,675)

*Prerequisites: Students must submit a written application form to the Co-op coordinator to be accepted in the program. Students must have demonstrated dependability through attendance, behavior and must have at least a 2.0 GPA or the consent of the instructor.*

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations. This course satisfies the consumer education requirement for graduation if the entire year is completed.

**English 4 –Journalism A/V Production** Grade 12, Elective, Semester (125)

*Prerequisites: Junior English*

This course meets the four-year English requirement if paired with another semester of English IV to count as a full year of English credit; it is offered both semesters. This course will explore principles of journalism, basic rhetorical concepts, writing to convey information in a variety of media, and readings in media criticism and a range of other topics. Some instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn the operation and maintenance of video and DVD recording equipment, video/digital cameras, microphones, computers, and other production equipment used in modern journalism. Students will learn techniques for working in electronic media to produce news articles, newsletters, and broadcast in audio and video.

**Honors Computer Operations and Programming** Grades 10-12, Elective, Semester (582)

*Prerequisite: Computer Concepts and Computer Operations & Programming I. Requires detailed curriculum goals with consent of teacher and department chairperson.*

General course description is the same as Computer Operations and Programming II., however, honors students are expected to progress through the required content at a more accelerated pace and there is a greater emphasis on research and application. All honors students are expected to complete an approved research project in conjunction with the required course content. This course is recommended for highly motivated, high ability students.

**Marketing/Sports Marketing** Grades 10-12, Elective, Semester (547)

This class is designed for students to learn the functions of marketing as they relate to sports and entertainment. The exercises, case problems and activities for this course are designed to develop student understanding of the sport/entertainment industries, their economic impact, and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Throughout the course, students are presented problem solving situations for which they must apply academic and critical thinking skills. Photography, videography, and photo/video editing will be a strong component of this course.

**Multimedia Development I** Grades 9-12, Elective, Semester (518)

The goal of this course is to explore fundamental techniques in digital photography and video production. Ideal for students eager to explore Photoshop, work with layer techniques, gain an understanding of how to do basic photo repairs and color enhancements using Adobe Photoshop CC. Students will develop the ability to capture great video images and audio and be able to edit those two elements together to tell a story. Software for this includes Adobe Photoshop, Premiere Pro and Illustrator.

**Multimedia Development II** Grades 9-12, Elective, Semester (519)

*Prerequisite: Multimedia Development I with a grade of C or better.*

This course is a continuation of advanced application of multimedia development I. Digital photography and manipulation, video editing and production will be emphasized

**Personal Finance** Grades 10-12, Elective, Semester (512)

This course develops an understanding of financial literacy and includes skills used in everyday activities both for personal and professional use. It provides an opportunity to develop skills related to personal financial management as well as budgeting, financial planning, handling of money, banking, insurance, taxes, and the role of the consumer. It also satisfies the consumer education requirement for graduation

**Tech for Success** Grades 9-12, Elective, Semester (524)

Tech for Success is a course designed to help students succeed in high school and beyond. They will develop basic skills in touch keyboarding technique and necessary skills in Office 365 that they will find helpful in completing assignments across the curriculum and tasks in many occupations. Students will utilize the Microsoft Office suite and focus on Word, Excel, and PowerPoint. In addition, Internet research and online safety will be included in the course. Upon completion they will receive a cyber safety certificate from Career Safe.

**Web Page Design** Grades 9-12, Elective, Semester (530)

The Web can be yours; you can make your own website, and have complete control over your presence on the web. Students in Web Design start at the very beginning and end up making incredible designs and features including professional images for your website using Photoshop. Web Design students master the production techniques and software programs used by working professionals on commercial Websites. The course includes: hands-on training in page creation, site architecture, and file transfer techniques, as well as visual design principles, graphic production skills, and site automation strategies. Studies include work with HTML code, Cascading Stylesheets and FTP. Server-side includes: Adobe Photoshop, Adobe Dreamweaver, and Flash. Students leave the course with the hands-on experience needed to design and produce professional quality Websites.

## ***CTE - FAMILY AND CONSUMER SCIENCE***

**Adult Living** Grades 10-12, Elective, Semester (607)

This course is designed to focus on the knowledge, attitudes, and behaviors needed to participate in positive, caring, and respectful relationships in the family, community, and workplace. This project-based course uses communication, leadership and management methods to develop knowledge and behaviors necessary for individuals to become independent, contributing, and responsible participants in family, community, and career settings. Emphasis is placed on the development of techniques and strategies to assist individuals in responding to situations presented in family relationships and the workplace. The course content includes: managing responsibilities, satisfactions and stresses of work and family life; analyzing personal standards, needs, aptitudes and goals; roles and responsibilities of living independently and as a family member; demonstrating goal-setting and decision-making skills; identifying and utilizing community resources; and developing effective relationships to promote communication with others. The course provides students content to identify resources that will assist them in managing life situations.

**Child Development** Grades 10-12, Elective, Semester (609)

Child Development and Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio. The major aim of the course is to provide learning experiences, which help students to know and understand about the physical, cognitive, and psychosocial development of children from conception to adolescence. Topics will include family planning, prenatal care, pregnancy and the complications involved, use and care of the infant simulator, characteristics and care of the newborn. The role of the parent and family, as well as the environmental aspects, will be discussed as to how they shape the character and personality of the child. Other areas will include practicing good health and safety standards for children, encouraging children to utilize their resources, discipline, family values, and attitudes.

**Clothing and Textiles I** Grade 9-12, Elective, semester (601)

This course is designed to provide basic knowledge and understanding of the design, development, and production of textile products. Through hands-on and project based learning experiences students will discover fiber characteristics, fabric construction methods, elements of science and design in textiles and apparel, and basic construction skills used in interior furnishings and apparel industries. This course emphasizes awareness and investigation of careers and industry trends in textiles.

\*\*This class requires students to purchase all necessary supplies for their own personal projects.

**Clothing and Textiles II** Grade 9-12, Elective, semester (604)

*Prerequisite: Clothing and Textiles I*

This project-based course focuses on the implementation and recognition of design principles in selecting, constructing, altering, and remodeling textile products. Project management skills, including efficient use of time, materials, technique, and tools are incorporated throughout the course. Topics include: engineered fabric constructions; fiber and textile trends; color theory; principles of design; fabric finishes; industry construction techniques; use of industry tools, equipment, and terminology; knowledge of resources and vendors; research and evaluation of textile products for special needs populations; impacts of technology; construction, alteration and re-design skills; and simple flat pattern design and recognition.

\*\*This class requires students to purchase all necessary supplies for their own personal projects.

**Culinary Occupations I (Food Service Occupations I)** (Professional Cook's Class I) Grade 10-12, Elective, Full year or semester, 1 or 2 periods (669)

*Prerequisite: A 2.0 grade average in previous high school food's classes or the teacher's consent. This course is designed to provide students interested in careers in food service with information and practical experiences needed for the development of food service job-related competencies. (Must begin course 1st semester only)*

This course provides terminology, culinary math, and practical experiences needed for the development of culinary competencies and workplace skills. Safety and sanitation instruction and classroom application will prepare students for an industry recognized sanitation exam. Classroom experiences will develop skills to work in the front of the house, back of the house, and work stations. Additional content may include: following safety procedures, cleaning and sanitation, arranging services and serving guests, event planning, customer service and relations, preparing beverages, garnishes, toppings, fillings, and appetizers, preparing and serving food in quantity (food service styles), baking and pastry arts including cake decorating, hors d'oeuvres, and breakfast cookery. Students will be provided opportunity training experiences on commercial equipment.

**Culinary Occupations II (Food Service Occupations II)** (Professional Cook's Class II) Grades 11-12, Elective, Full year (671)

*Prerequisite: Food Service I with a 2.6 grade average in that class and the teacher's consent. This advanced course will continue developing the knowledge and skills begun in Culinary Occupations I.*

Culinary Occupations II places special emphasis for students to develop operational management skills -including design and organization of food service systems in a variety of settings, human relations, and personnel training and supervision. Additional topics include: advanced safety procedures, utilizing quantity food equipment, utilizing food recipes, preparing various food products, serving guests, management skills, human relations, performing side work, table and counter cleaning duties, food cost accounting; taking inventory; advertising; monitoring consumer and industry trends; and individualized mastery of culinary techniques. Training experiences involve equipment and facilities simulating those found in business and industry.

**Fashion and Design** Grades 10-12, Elective, Semester (602)

*Prerequisite: Clothing and Textiles I*

Fashion Design students will learn the dynamics of the fashion industry including designers and history, design and apparel production, manufacturing quality control and distribution of products, and careers and merchandising trends. Students will explore career opportunities and demonstrate advanced skills in apparel construction, textiles and technology. Experiences may include pattern design, surface design, clothing construction and manufacturing, planning for special needs, fitting and alteration, project development, safety codes, and portfolio development. Students will use state-of-the-art fashion design software to design and create clothing. \*\*This class requires students to purchase all necessary supplies for their own personal projects.

**Introduction to Family and Consumer Sciences (LIFE)** Grade 9, Elective, Semester (597)

This course introduces students to the field of family and consumer sciences and the many career opportunities available in this broad field. The course includes theory and laboratory experiences in the following content areas: Nutrition and culinary arts; textiles and design; family, career, and community leadership development; human development and life-long learning; facility design, care, and management; and interpersonal relationships and life management skills.

**Nutrition & Culinary Arts I (Food and Nutrition I)** Grades 9-12, Elective, Semester (599)

This course includes classroom and laboratory experiences needed to develop a knowledge and understanding of culinary principles and nutrition for people of all ages. Course content encompasses food service and preparation management using the decision-making process; meeting basic needs by applying nutrition concepts; meeting health, safety, and sanitation requirements; maximizing resources when planning/preparing/preserving/serving food; applying hospitality skills; analyzing nutritional needs in relation to change; and careers in nutrition and culinary arts, including entrepreneurship investigation.

**Nutrition & Culinary Arts II (Food and Nutrition II)** Grades 10-12, Elective Semester (600)

*Prerequisite: Culinary Arts I*

Nutrition and Culinary Arts II provides principles of application into the hospitality industry, including nutrition, culinary, and entrepreneurial opportunities. Course content includes the following: selection, purchase, preparation, and conservation of food, dietary needs and trends, regional & international cuisine, safety and sanitation, and careers in food service industries. All of these concepts can be interpreted through laboratory experiences.

**Parenting** Grades 10-12, Elective, Semester (610)

Parenting addresses the knowledge, skills, attitudes, and behaviors associated with supporting and promoting optimal growth and development of infants and children. The focus is on research-based nurturing and parenting practices and skills, including brain development research, that support positive development of children. Students will explore opportunities in human services and education-related careers and develop a career portfolio. This class is designed to help students think through the responsibilities, satisfactions, and stresses of parenthood. Many types of parenting situations are examined. Stress prevention and management and the work of community agencies that help parents deal with various types of parenting crises are emphasized. The course content includes the following areas: managing and organizing parenting by applying decision-making and goal-setting skills; applying the basic principles of the parenting process; practicing health and safety standards as related to parenting; providing experiences which encourage parents and children to maximize resources; infant simulator; encouraging human relation skills in children/adolescents; and evaluating impact on parenting of family and career changes. Special attention is given to the needs of teenage parents and the importance of readiness for parenthood.

## ***CTE - HEALTH OCCUPATIONS TECHNOLOGY***

**Certified Nursing Assistance** Grade 11-12, Semester, (631) 1 credit at CCHS, 2 periods, 7 Dual Credits available [JALC NAD 101]

*Students must take Accuplacer exam and score a 50 or better on Reading comprehension. Students must also have a 2-step TB test before beginning the class and submit to a Health Care Criminal Background Check at the student's cost of \$45. There is a \$67 state license exam fee as well. Students must provide their own transportation to site during clinical experience.*

*Prerequisite: Orientation to Health Occupations*

***Excellent attendance is mandatory. Students must provide their own transportation to the health care site.***

The course is composed of a combination of subject matter and experiences designed to perform tasks of individuals receiving nursing services. The student learns those competencies needed to perform as a nurse assistant under the direction of the registered nurse. The units of instruction should include the role of the nurse assistant while covering general health care topics; medical terminology; patients/clients and their environment; special feeding techniques; psychological support and, in long term and terminal illness, death and dying (e.g., chronically ill, children, new mothers, and so on); and all other basic nursing skills. Topics covered typically include normal growth and development; feeding, transporting patients, hygiene, and disease prevention; basic pharmacology; first aid and CPR; observing and reporting; care of equipment and supplies; doctor, nurse, and patient relationships and roles; procedure policies; medical and professional ethics; and care of various kinds of patients. In order to have an approved nurse assistant program (one in which the students are eligible to sit for the certifying exam) the program must be approved by the Illinois Department of Public Health. 48 Clinical hours outside of the classroom are required.

**Medical Terminology** Grade 11-12, semester, (625) Dual Credit [JALC HIT217]

This is an introduction to medical terminology which includes word building principles; basic anatomy and physiology; key anatomical and physiological terms; combining forms, suffixes, and prefixes. In addition, students will learn to listen critically for important terms, respond to others using medical terminology and generate their own terminology-rich writing and speech.

**Orientation to Health Occupations I**– Grades 10-12, Elective, Semester (425)

***Excellent attendance is mandatory. Students must provide their own transportation to the health care site.***

The course should expose students to the variety of opportunities available within the health care industry (e.g., such as nursing, therapy, vision and dental care, administrative services, and lab technology) which should include classroom and community-based activities. The main purpose of this course is to assist students in further development of their self-concept and in matching personal abilities and interest to a tentative career choice. The suggested course content should provide in-depth information into health occupations careers and trends, the occupational and educational opportunities and the educational, physical, emotional and attitudinal requirements.

## ***CTE - INDUSTRIAL TECHNOLOGY***

**Architectural Design Drafting I** Grades 11-12, Elective, Full year (621)

*Prerequisite: Beginning Drafting & Design*

This course is designed to provide students interested in a career in Architecture with information and practical experience needed for the development of job-related competencies. Students are made aware of the career opportunities available in the Architectural Drafting and Architectural Drafting CAD - CADD field. Instruction is provided in the areas of planning and organizing activities, researching information, performing general office procedures, preparing of preliminary drawings, basic layout, detail drawings, reproduction techniques, producing working drawings, and computer aided drafting. Students are also provided with instruction in producing architectural drawings in the areas of presentation, floor plans, illustration of landscape features, sketching preliminary floor plans, drawing foundation plans and sections, exterior elevations, stair sections, chimney sections, roof sections, finish schedules, preparing plumbing, HVAC and electrical plans, and structural drawings. *Honors credit requires extra coursework.*

**Architectural Design Drafting II** Grades 12, Elective, Full Year (631)

*Prerequisite: Architectural Drafting I*

Instruction is provided in the areas of locating information using computer data files, determination of materials and availability, project conferences, checking plan dimensions, drawing schematic sketches, preparing scale sketches, producing drawings from written/verbal instructions, application of coordinate dimensioning standards, creating drawings using a plotter/printer, producing renderings and/or charts and graphs, and common plan features. Instruction is also provided in the areas of drawing framing plans, wall sections, fireplace sections, door sections, door and window schedules, dimensioning structural steel drawings, constructing column detail drawings, preparation of structural foundation, slab and floor plans, drawing electrical, block, schematic, and electrical connection drawings. Skills relating to CAD include preparation of a basic CAD drawing, building and editing a data base, developing a 3-dimensional drawing and selecting appropriate line work, line weight, and color. *Honors credit requires extra coursework.*

**Automotive Courses (Dual Credit) – See Off Campus-Dual Credit Classes**

**Beginning Drafting & Design** Grades 10-12, Elective, Year (6622)

Beginning Drafting is an introductory level drafting course. During this course students will learn the basic fundamentals of drafting and/or computer aided drafting (CAD). The instruction will include the care and use of drafting equipment, freehand sketching, orthographic projection, lettering techniques, dimensioning standard, pictorial drawings, drawing reproduction, and an introduction to CAD.

**Carpentry Exterior** Grades 10-12, Elective, Semester. (6811)

This course is designed to introduce students to the Carpentry/Carpenter occupation. Students are instructed in areas of safety, including hand tool, power tool, ladder, scaffolding and these of safety harnesses. Students are introduced to the theoretical knowledge needed to lay out rafters, stairs, and basic framing techniques. Students demonstrate knowledge of blueprint reading, including foundations, concrete, floor plans, specification schedules, and electrical, plumbing and mechanical symbols. Students demonstrate entry-level skills in all facets of residential construction. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum. Students that finish all assignments for OSHA training will receive a 10 hour OSHA Construction Industry certification upon completion.

**Carpentry Interior** Grades 10-12, Elective, Semester (6821)

This course provides learning experiences related to the erection, installation, maintenance and repair of building structures and related utilities. Students are instructed in areas of safety, including hand tool, power tool, ladder, scaffolding and the use of safety harnesses. Students demonstrate knowledge of exterior trim and finishes, energy conservation in residential construction, and design of stairs and rafter building. Students gain knowledge of planning and zoning regulations and building codes. Students are introduced to estimating both materials and construction costs, and demonstrate basic knowledge in applying drywall materials, stair-building skills, designing and erecting wall partitions, applying roofing materials, and installing common siding and interior finish. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum. Students that finish all assignments for OSHA training will receive a 10 hour OSHA Construction Industry certification upon completion.

**3D Animation and Design I** Grades 10-12, Elective, Full year (619)

The 3D animation and design course is designed to provide students with a fundamental knowledge of 3D modeling (drawing). Application of surface materials, textures and basic animation will be included. This class will involve individual and group projects based on student interests, i.e....special effects for film, architecture, engineering design and advertising. Integration of fundamentals using 2D to 3D visualization methods and solid modeling techniques will be explored exposing students to up-to-date industry standard practices in 3D drawing. This digital graphics course provides students with the opportunity to use the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Course topics include modeling, simulation, animation, and image retouching.

**3D Animation and Design II** Grades 11-12, Elective, Full year (620)

*Prerequisite: 3D Animation and Design I*

This course continues the development of student's skills in the area of 3D animation and design. Students will develop skills to work in teams to develop a production for advertising, architecture, or film. Digital Graphics course provides students with the opportunity to use the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Course topics include modeling, simulation, animation, and image retouching.

**Electrical Trades I** Grades 11-12, Elective, Semester Dual Credit [JALC ELT 102] (CCHS 615)

This course is designed to provide students with instruction and training in areas that prepare them to enter the electrical trades. Areas of instruction include electrical theory, circuit design and operation, the national electrical code, blue print reading, construction blue print interpretation, and test equipment usage. Students plan and organize wiring tasks, and gain practical experience by wiring mock-ups and trainers. Students become familiar with tools, materials, and methods used in residential wiring. Students troubleshoot circuits for faulty operation and make repairs. Specific studies include AC and DC theory, series and parallel circuits, motor and generator theory, motor controls, lighting and appliance wiring, low voltage wiring, testing and repair.

**Electrical Trades II** Grades 11-12, Elective, Semester (616)

*Prerequisite: Electrical Trades I*

This course is a continuation of Electrical Trades I, advancing the basics learned in the first course. The study centers around advancing basic theory, multi-phase electricity, transmission and delivery systems, electronic and advanced motor controls, alarm and sensory systems, light commercial and industrial wiring, and advanced circuit design. Students continue to gain practical skill by working on trainers, mock-ups, and on-the-job projects. This course also introduces students to the skills needed to service, repair, and replace a wide range of equipment associated with automated or instrument-controlled manufacturing processes using PLCs.

**Engineering Design/Mechanical Drafting I** Grades 11-12, Elective, Full year (6623)

*Prerequisite: Beginning Drafting & Design*

This course introduces students to layout to scale using specified tolerance, preparing detail drawing for individual parts from drawings, layout and creating assembly drawings, and preparing mechanical orthographic subassembly drawings. This course also includes a sequence of CAD experiences in 2-dimensional and 3-dimensional drawing generation to include vocabulary development, system operation, entity creation, dimensioning and text insertion, plotting, three dimensional coordinate system, 3-D parts detailing and assembly drawings, wire frame models, and system management relative to hard disk and tape storage systems. *Honors credit requires extra coursework.*

**Engineering Design/Mechanical Drafting II** Grades 12, Elective, Full year (6625)

*Prerequisite: Engineering Design/ Mechanical Drafting*

Instruction is provided in the areas of identifying appropriate interfacing personnel (internal/external), producing renderings and project time schedules, producing structural working drawings as structural steel plans, dimension structural steel drawings, and draw beam connections, and producing electrical and electronic working drawings as electrical and electronic schematic diagrams. Additional skills introduced in this program include determining the requirements of a specific drafting job, preparing preliminary drawings such as freehand, isometric, orthographic, and oblique sketches; preparing detail drawings such as creating assembly drawings, orthographic projections, sectional views, auxiliary views, isometric views and letter drawings; producing mechanical working drawings such as detailing components of mechanical orthographic assembly and subassembly drawings; using CAD command processes as preparing a basic CAD drawing, start up, log on, retrieve, save, log off and shut down CAD system; creating disk files, copying disk files, and generating a grid on drawing. *Honors credit requires extra coursework.*

**Graphic Communication I** Grades 10-12, Elective, Semester (665)

This Course will provide an introduction to various methods of communication technology. The Course content will include design, layout, digital photography, bindery operations, scanning, screen-printing, and employment and post-secondary school graphic communication opportunities.

**Graphic Communication II** Grades 10-12, Elective, Semester (667)

*Prerequisite: Graphic Communication I*

This course will provide advanced training in all areas of communication technology production and program safety in simulated commercial shop conditions. The course content will include graphic design, advanced desktop publishing, electronic imaging, binding and finishing, and silkscreen printing. Emphasis will be given to professionalism, problem solving skills, and working with a production system. Career and post-secondary educational opportunities will be discussed.

**Introduction to Technology & Engineering** Grade 9-10, Elective, Full Year (611)

Introduction to Technology & Engineering is comprised of the following areas: Production, Transportation, Communication, Energy Utilization and Engineering Design but is not limited to these areas only. This course will cover the resources, technical processes, industrial applications, technological impact and occupations encompassed by that system.

**Principles of Technology I** Grades 10-12, Elective, Full Year (622)

*Prerequisite: Completion of Algebra 1 or IAG 2*

This course provides learning experiences related to the principles that underlie today's high technology: force, work, rate, resistance, energy, power, and force transformers. The course deals with these principles as they apply in each of the four systems that make up both the simplest and the most complex technological devices and equipment: mechanical systems, fluid systems, electrical systems, and thermal systems. Learning experiences are designed to allow students to acquire knowledge and skills which are transferable to postsecondary technical programs. This class is taught as a CTE class and qualifies as a science credit.

**Principles of Technology II** Grades 11-12, Elective, Full Year (623)

*Prerequisite: Principles of Technology I.*

This course includes learning experiences related to the principles that underlie today's high technology: momentum, waves and vibrations, energy converters, transducers, radiation, optical systems, and time constraints. The course deals with these principles as they apply in each of the systems that make up both the simplest and the most complex technological devices and equipment: mechanical systems, fluid systems, electrical systems, and thermal systems. Learning experiences are designed to allow students to acquire knowledge and skills which are transferable to postsecondary technical programs. This course continues where Principles of Technology I left off. This class is taught as a CTE class and qualifies as a science credit.

**Robotics** Grades 10-12, Elective, Semester or Full year (6181)

*Prerequisite: None*

This course will teach the scientific methodology as it is applied to problem solving. Students will learn about analog and digital information, integration of basic electrical concepts, fabricating and building prototypes, embedded systems and artificial intelligence. Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers. 1<sup>st</sup> semester focuses on mechanics and the engineering design process. 2<sup>nd</sup> semester focuses on programming, sensors, and motor control.

**Small Engines** Grades 10-12, Elective, Semester (650)

Small engine repair is an instructional program that prepares individuals to troubleshoot, service, and repair a variety of small internal-combustion engines, involving both two and four cycle engines used on portable power equipment. Planned activities will allow students to become knowledgeable of fundamental principles and technical skills related to troubleshooting, repairing, identifying parts and making precision measurements. Safety will be a key component of this class. Students will also be exposed to career opportunities related to small engines.

**Welding Courses** – (Dual Credit) See Off Campus-Dual Credit Classes.



# ENGLISH

## **English 1** Grade 9, Required, full year (091, 092, 093)

English 1 (Level 1 and 2) provides an introduction to basic literary genres (short story, novel, poetry, drama and myths). Specific attention is given to the improvement of reading, thinking, and discussion skills in connection with required reading. In composition, students are introduced to writing as a process. Special attention is given to pre-writing, and post-writing activities. Creative and journal writing are part of the writing requirements. Level 3 and student service is geared toward remediation. The basic concepts of capitalization, punctuation, spelling, grammatical usage and effective expression are enhanced by instruction in the writing process. Improvement of reading skills such as drawing inferences, perceiving details, comprehending word meaning in context, and understanding themes and related ideas is a major goal.

## **English 2** Grade 10, Required, full year (101, 102, 103)

English 2 (Levels 1 and 2) organizes the study of literary forms and techniques by theme while continuing to build on students' reading, writing, and critical thinking skills. Students write literary analysis, creative pieces, personal essays, position papers, and reviews. Students refine their speaking and listening skills through oral presentations and collaborative work. Further attention is given to non-fiction reading and writing strategies of recognizing and using methods of rhetorical strategies and argumentation in writing. In level 3 and student service, basic reading and writing skills are stressed. Students are placed at this level based on test scores, IEP and/or teacher recommendation.

## **English 3** Grade 11, Required, full year (111, 112, 113)

English 3 (Levels 1 and 2) provides a survey of American literature, which includes study of ethnic literatures and American dialects. Students read from a variety of diverse voices on themes that span across the American literary tradition in order to find patterns of experience. Students write for a variety of purposes to a variety of audiences with emphasis on research and other academic writing. Students refine their speaking and listening skills through oral presentations and collaborative work. In level 3 and student service, improvement of language arts and reading competencies are stressed. Students are placed at this level based on test scores, IEP and/or teacher recommendation.

## **English 4: Shakespeare** Grade 12, Elective, one semester (144)

*This course meets the CCHS four-year English requirement if paired with another English IV course.*

This class takes a genre-based approach to the study of Shakespeare. Students will examine two great tragedies, *Hamlet* and *Macbeth*. There will be a wide range of comedies included as well as a history play studied. Other plays will be included based on student interest and available time. The philosophical questions explored relate to issues of identity; some of the identity topics are the conscience of a killer, what it means to be human, and the role of the outsider in society. Student project options include media productions, art work, music, creative writing, and scene performances. Essay exams and research are also required.

## **English 4: Creative Writing** Grade 12, Elective, one semester (146)

*This course meets CCHS four-year English requirement if paired with another semester of English IV to count as a full year of English credit. It is offered both semesters.*

Everybody's got a story to tell—and you can tell yours in this class. You'll begin by exploring a variety of ways to defeat writer's block and find ideas to write about. Then you will write in a variety of genres, including formal and informal poetry, vignettes, and short stories. Along the way you'll conduct research to write more realistically, participate in writer's workshops, and apply the writer's mantra, "show, don't tell." By the end of the semester, you will submit work to several publications and/or writing contests and have the opportunity to become a published author.

## **English 4: Journalism** Grade 12, Elective, Semester (125)

*Prerequisites: Junior English*

*This course meets four-year English requirement if paired with another semester of English IV to count as a full year of English credit; it is offered both semesters. This course does not meet NCAA requirements.*

This course will explore principles of journalism, basic rhetorical concepts, writing to convey information in a variety of media, and readings in media criticism and a range of other topics. Some instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn the operation and maintenance of video recording equipment, microphones, computers, and other production equipment used in modern journalism. Students will learn techniques for working in electronic media to produce news articles for an online audience and social media and broadcast in audio and video.

**English 4: Major Themes in Literature** Grade 12, Elective, full year (121, 122, 123)

*This course meets the CCHS four-year requirement if taken as part of a one year sequence. The first or second semester may be paired with another semester of English IV to count as a full year of English credit.*

*There are three options for this course:*

**English 4: Major Themes in World Literature (121)**

The first semester is an exploration of the Western literary traditions of heroes, villains, and other archetypes. Students typically read Beowulf, The Canterbury Tales, the plays of Sophocles, and 1984. The second semester delves into the realms of good and evil, love, and values. Students typically read Frankenstein, Metamorphosis, Hamlet/Macbeth, and Like Water for Chocolate. This class is designed to prepare students for the rigor of humanities studies at a four-year institution. Students write 3+ papers per quarter.

**English 4: Major Themes in Contemporary Literature (122)**

The course focuses on applying literary criticism to classic and contemporary texts, as well as exploring the theoretical constructs of pop culture. In the fall, students typically study and apply theoretical concepts of feminism, archetypal, psychological, Marxist, and New Historicism to the graphic novel Beowulf and Arthurian legends and compare with modern stories such as Marvel superheroes and young adult novels like Chris Crutcher's Deadline. In the spring, students explore Abstract theory, monsters, and villains with classics like Metamorphosis and Dracula paired with contemporary novels like Warm Bodies. Students write 2-3 papers per quarter

**English 4: Major Themes in Literature (123)**

Students will read young adult novels and non-fiction texts with an emphasis on mastering reading strategies and technical writing skills to be applied to students' post-secondary goals. Students will write 2-3 papers per quarter. One section will be co-taught.

*The following applies to all three options:*

The first semester is a literature survey and an exploration of Western literary traditions and themes. The second semester delves further into other archetypal patterns and genre studies. Both semesters include orations, debates, persuasive and expository essays, creative writing, journals, and research projects. Level one is a college prep course. Level two is an intermediate course with more support, and level three is a remediated course.

**English 4: Graphic Novels** Grade 12, Elective, one semester (126)

*This course meets CCHS four-year English requirement if paired with another semester of English IV to count as a full year of English credit.*

Projects and writing will focus on the themes of the course goals/units. Students will read graphic novels that explore those themes (History & Culture; Identity; Heroes & Villains; Illness, Trauma, and Overcoming Obstacles). Personal reactions and input from students' previous experiences with both the genre and the themes will be encouraged during class discussions. An emphasis will be placed on sharing ideas and observations of diverse opinions with respect. Students will practice valuing others' perceptions of the same material. The course will emphasize visual literacy; students will work to articulate how visual symbols translate into shared understanding. Students will write personal reaction papers, analyses of text and visual juxtaposition, persuasive/argumentative position papers, and prepare graphic narratives. One research paper must be completed and at least one essay must be literary.

**English 4: Technical English** Grade 12, Elective, Dual Credit, one semester (147)

*This course meets CCHS four-year English requirement if paired with another English IV course. Students will receive 3 college credits for this dual credit class. This course does not meet NCAA requirements.*

Technical Writing is a composition course especially for engineering, science, social science, and vocational-technical students. Encompassing many different approaches to solving specific communication problems and emphasizing critical thinking skills, this course covers the written communication required in a job situation in the technical fields.

**Honors English 2; Honors English 3; Honors English 4** Elective, full year

Students in the 9th, 10th, and 11th grade English classes who have shown specific academic aptitude and creativity are recommended for Honors class for the following year. Teachers make their recommendations on the basis of intellectual ability and achievement; a checklist which includes aptitude and skill in oral and written communication, ability to work with abstract concepts, ability to work independently, ability to think logically and critically, and motivation, among other items, is also employed. The department's teacher recommendation committee reviews student folders, which contain samples of writing, exams and other relevant material and makes final recommendations.

**English as a Second Language (ESL) and Advanced ESL** are available at each grade level for qualifying students. (154, 155)

## ***FINE ARTS – VISUAL ARTS***

### **Fundamentals of Art** Grades 9-12, Elective, Semester (740) (Early Bird or school day)

Students in this course learn the basics of the visual arts through the elements of art. Technical skills in two-dimensional materials will be emphasized. Students will apply the basic language of art to a variety of art processes. Exploration might include printmaking, sculpture, computer-generated imagery, graphic/commercial art, surface design and varied drawing and painting materials. Art history, criticism, and aesthetic will be included as it applies to the individual assignment. Art careers will also be explored.

### **Advanced Art** Grades 9-12, elective, semester (may be repeated for credit) (750) (Early Bird or school day)

*Prerequisite: Introduction to Art*

Students will build on their prior technical skills and begin to explore art as a vital communication. Art concepts will be taught and emphasized. Through varied materials, students will be able to apply generalized concepts to their own work. This course may be repeated for credit.

### **Art Studio** Grades 11-12, Elective, semester, may be repeated for credit (744)

*Prerequisite: Advanced Art, pass with a "C" or better.*

Students continue the study of the visual arts through varied materials, techniques, historical and contemporary works of art and aesthetics. Students will begin to develop a personal vision and preference for a medium. Portfolio development will be emphasized. Participation in exhibitions will be recommended.

### **Honors Art Studio** Grades 11-12, Elective, semester, may be repeated for credit (745)

*Prerequisite: Art Studio and teacher recommendation.*

General course description is similar to Art Studio. There is an additional expectation of the student to enter competitions and to exhibit work. Students are required to visit and write critiques of local art shows and exhibits. Students will be able to prepare an artist's statement and analysis of their own work. Students in this class should have a high degree of self-motivation, good study skills and the ability to work independently, as well as, in group situations. Participation in exhibitions will be recommended.

### **Art Appreciation** Grades 11-12 Elective, Semester (752) Dual Credit [JALC Art 111]

Art Appreciation is designed to develop interest, aptitude, and understanding through visual, verbal, and experience with art. A critical understanding of how we live in a world with visual art is included. This course emphasize exposure to the visual arts. Hands-on studio projects along with lecture and art history are important components of this class.

### **Fundamentals of Ceramics** Grades 9-12, Elective, Semester (702) (Early Bird or school day)

Students will study the art elements and principles through the medium of clay. Basic hand building construction methods of pinch, coil, and slab building will be used. Students also study clay preparation, glazing, historic and contemporary trends and aesthetics. Basic health and safety issues will be taught relative to the materials used.

### **Exploration of Ceramics** Grades 9-12, Elective, Semester, may be repeated for credit (703) (Early Bird or school day)

*Prerequisite: Fundamentals of Ceramics*

Students will continue the study of the elements and principles of art through the medium of clay. Students will continue working on mastery of hand building techniques and will begin using the potter's wheel. Advanced students will develop a better understanding of the properties of clay and glazing as well as exploring sculptural techniques, and an emphasis on building a unique vision for their work. Basic health and safety issues will continue to be emphasized relative to the materials used.

### **Ceramics** Grades 11-12, Elective, Semester (704) Dual Credit [JALC Art 250] (Early Bird or school day)

This is an introduction to fine arts ceramics. Hand building process is pinching, slab construction, and coil building will predominate with some opportunity for beginning wheel throwing. Projects will include both vessel making and sculpture. Students will gain familiarity with clay, slips, glazes, and simple firing techniques. In addition they will be introduced to the scope of historical and contemporary ceramic art. Basic health and safety issues will be taught relative to the materials used.

### **Photography** Grades 9-12, Elective, Semester (715)

Students explore both the technical and aesthetic aspects of black and white photography, and an introduction to digital photography. Through proper camera handling, metering, exposing, film processing, and printing, students learn the basics to controlling photographic materials. Through lectures, readings, assignments and critiques, students explore a variety of image making and produce original work incorporating their individual conceptual content.

**Advanced Photography** Grades 9 – 12, Elective, Semester (717)

*Prerequisite: Photography with a C or better.*

Students will continue to explore the finer points of black and white, and digital photography, through the use of specialized equipment and techniques. Students are encouraged to enter contests and competitions. The individual style of each student is used and built upon. This course may be repeated for credit.

## ***FINE ARTS – INSTRUMENTAL MUSIC***

**Band** Grades 9-12, Elective, full year or by semester (710)

*Prerequisite: 1 year previous study on band instrument or consent of the instructor.*

Fall semester is spent in parade and field drill with concentration on local performances. After school time is required for 2 fall semester rehearsals in addition to weekend performances at 4-5 CCHS football games, 3 CCHS basketball games, and 3 local parades. Concert season begins in October and concentrates on the study and performance of standard concert band literature with concerts in December and April and spring semester marching training. Students of this group perform with the Pep Band for home football and basketball games. (This course may be taken to fulfill PE requirements.)

**Band (Percussion)** Grades 9-12, Elective, Full Year (713)

*Prerequisite: 1 year previous study on band instrument or consent of the instructor.*

Fall season begins with a summer camp occurring 2 weeks before school begins and is spent in parade and field drill with concentration on performance and competition. After school time is required for rehearsals in addition to extensive weekend performances and travel. In mid-October percussion class transitions to an independent ensemble performing Percussion literature (except for parades in December and late spring). (This course may be taken to fulfill PE requirements.)

**Competitive Band** Grades 9-12, elective, full year (714)

*Prerequisite: 1 year previous study on band instrument or consent of the instructor.*

Fall season begins with a summer camp occurring for 2 weeks before school begins and is spent in parade and field drill with concentration on performance and competition. After school time is required for rehearsals in addition to extensive weekend performances and travel. Concert season begins at the end of October and concentrates on the study and performance of standard concert band literature, 2-3 concerts, competition, and performance at the graduation ceremony. Students of this group also comprise the Pep Band for home football and basketball games. Percussionists should sign up for Band (Percussion). (This course may be taken to fulfill PE requirements.)

**Honors Band** Grades 10-12, Elective, Full Year (711)

*Prerequisite: Permission of instructor.*

Honors band will be taught in conjunction with Advanced Band class and thus will contain all the Advanced Band course requirements in addition to requirements to research areas of musical interest, audition for IMEA All-District Ensemble, take at least one solo and two ensembles to Solo and Ensemble contest, and attend all pep band performances. (This course may be taken to fulfill PE requirements.)

**Jazz Ensemble** Grades 9-12, Elective, Full Year, early bird class (727)

*Prerequisite: Audition.*

This class is a performance ensemble which focuses on performance practices of the jazz musician. This group performs numerous required performances throughout the school year. Knowledge of music theory, improvisation and modern jazz styles are necessary for success. After school attendance at 5-6 events is required in addition to class time.

**Marching Guard** Grades 9-12, Elective, First Semester only (712)

*Prerequisite: Audition will take place in Spring before the school year. Students are encouraged to sign up for the class in order to be contacted for audition dates.*

This group makes up the dance and flag element of Marching Band. Fall semester begins with a 2 week summer camp, which takes place during the final 3 weeks of summer and is spent in parade and field drill with concentration on performance and competition. After school time is required for rehearsals in addition to weekend performances and travel. Students wishing to participate in both advanced band and marching guard should sign up for the advanced band course second semester only. (This course may be taken to fulfill PE requirements.)

**Beginning Guitar** Grades 9-12, Elective, Semester (737)

This course addresses the needs of any student wishing to learn to play guitar. Students will learn to play from notation, chords and tab in first position. This course is a recommended prerequisite for guitarists in Advanced Strings.

**Advanced Strings** Grades 9-12, Elective, semester or full year (738)

*Prerequisite: Basic skills and understanding of the acoustic stringed instrument.*

This course will focus on developing the ability to perform at a high degree of quality in the small ensemble and solo genres. It is open to players of other stringed instruments who are comfortable playing from written notation.

**Piano** Grades 9-12, Elective, Semester (739)

*Prerequisite: None (No piano experience required)*

This class is for any student wishing to learn or improve piano skills. Each student will receive an individualized piano lesson each week. Students do not need to have a piano at home as they will be able to practice daily in class. Students will also learn music theory, music history, and performance pieces. The semester will culminate with a piano recital for family and friends.

**Advanced Piano** Grades 9-12, Elective, Semester, may be repeated for credit (7391)

*Prerequisite: Previous piano experience and teacher recommendation*

Advanced Piano will be taught in conjunction with Piano and the general course description and requirements are similar. In addition to those listed in piano, students in Advanced Piano will also be required to perform a piano solo in ISHA Solo and Ensemble Contest in March and compose an original piano piece.

## ***FINE ARTS – VOCAL MUSIC***

**Choir** Grades 9-12, Elective, Semester or Full Year (7201) (Early Bird or school day)

This course is an introduction to choral singing at CCHS. Anyone interested in singing, regardless of experience, is welcome to join this ensemble. There will be an overview of singing technique, posture, and music reading. Students will sing a variety of styles of music and are offered numerous performance opportunities including concerts, solo and ensemble contest, organizational contest, and graduation.

**Advanced Choir** Grades 9-12, Elective, Full Year (7211) (Honors - 7212) (Early Bird or school day)

*Prerequisite: Permission of the instructor*

Advanced choir will be taught in conjunction with choir and will contain all of the choir requirements. In addition to choral concert attendance, students are required to audition for ILMEA District Festival Chorus, participate in a minimum of 1 solo and 2 ensembles at IHSA contest, and complete a research project each semester.

## ***FINE ARTS – SPEECH AND THEATER***

**Speech** Grades 9-12, Elective, semester (792) (Early Bird or school day)

The class is designed to introduce students to the many areas of public speaking. Units covered include informative and persuasive speaking, small group communication, and non-verbal communication. Students will have the opportunity to perform in a variety of situations that will help develop their critical thinking, leadership and speaking skills. Since the course tends to be performance oriented, students enrolling should be articulate and show a keen interest in language arts.

**Advanced Speech** Grades 10-12, Elective, semester (7931) (Early Bird or school day)

*Prerequisite: A grade of C in Speech or teacher recommendation.*

The class is designed to give students more opportunities to develop their communication skills. This class will focus mainly on building stronger presentation ability. However, strong verbal and written skills are still recommended. This course may be repeated for credit.

**Theatre** Grades 9-12, Elective, semester, Early Bird and school day (764) (Early Bird or school day)

This course is an introduction to basic principles of acting. Emphasis is on performance in workshop situations. Major areas of instruction are voice and articulation, pantomime, stage movement, improvisation, developing the role (scene study), creative dramatics, performance techniques and rehearsal skills. Rehearsal and performance is on both an individual and group level. This will be a lecture and lab course. A final performance is required for course credit.

**Advanced Theatre (EB)** Grades 10 12, Elective, semester (7651) (Early Bird or school day)

*Prerequisite: Theatre or the consent of the instructor*

This course is an opportunity for students to explore a variety of different acting experiences. Students will study both comedic, dramatic and improvisational performance. Additionally, the students will be given the opportunity to create original performances. These are performances that will be both written and performed by the student. Further, there will be an introduction to the technical side of theatre with experiences in both designing and running lights, and set building. By participating in this class, students will gain a stronger level of self-confidence and be more comfortable communicating in small and large group situations. This course may be repeated for credit.

## ***HEALTH & DRIVER EDUCATION***

**Driver Education**      Grades 9-12, Elective, 9 weeks, 1/4 credit (931,932) (Early Bird or school day)

*Prerequisite: The State of Illinois requires each student attending any public or non-public high school in the district to receive a passing grade in at least 8 courses during the previous 2 semesters prior to enrolling in a driver education course. At least one semester must come from their high school grades in meeting this requirement, the student will not be permitted to enroll in the course if this requirement is not met. A student must be at least 15 years old to enroll in the class.*

This nine-week class will consist of classroom instruction in motor vehicle safety involving state motor vehicle laws, the state instruction permit examination, motorcycle safety, safe driving procedures, decision-making techniques, drug education, etc. Six hours of behind-the-wheel instruction is required and will be conducted by taking students out of Study Hall. Pending all other qualifications are met, a student's enrollment will be based on their birth date. Students who qualify for the free and reduced lunch program can apply for a fee waiver for the school lab fee only. The lab fee (\$45.00) and the state fee (\$20.00) need to be turned in by *the end of the first 10 school days* during the regular school year and by *the end of the third day* during the summer class. The quarter following classroom instructions, students will have an opportunity for behind-the-wheel instruction.

**Health**      9<sup>th</sup> Grade Requirement, semester (450)

Health is a one-semester course required for graduation. Primary emphasis is directed toward current health issues critical to the adolescent. Special attention is focused upon understanding the basic structure and function of the human body, nutrition and weight control, family living and human reproduction, communicable disease, emotional health, drug education, consumer and environmental health, safety, first aid, and CPR. It is the purpose of the course to encourage and guide students to a better understanding of themselves and to contribute to their ability to achieve optimal physical, emotional and social well-being. There are no prerequisites and all health classes are coeducational.

# MATHEMATICS

## Course Sequence

<u>Freshman</u>	<u>Sophomore</u>	<u>Junior</u>	<u>Senior</u>
Integrated Alg/Geom 1	Integrated Alg/Geom 2	Integrated Alg/Geom 3	Transitions to Quant Lit&Stats
Algebra I	Geometry	Algebra II	Trig/Analytic Geometry
Accel. Algebra I	Hon Geometry	Hon Algebra II	Hon Pre-Calculus
Accel. Geometry	Hon Algebra II	Hon Pre-Calculus	Hon AP Calculus
			Introductory Statistics
			Contemporary Math

The sequences, shown above are most commonly followed by students. Alternative sequences are possible, if prerequisites listed below are met. Honors Courses are designed for students who have demonstrated exceptional mathematics abilities and are highly motivated and highly verbal. Admission to honors classes will be through application and department approval. Any student earning a semester grade of a C or below may not be eligible to continue in the honors math program. Honors math students will be encouraged to participate in academic contests. Refer to Page 2, #'s 7, 8, 9 for Honors Credit policy concerning 9th graders.

### **Accelerated Algebra I** Grade 9, full year (204)

*Prerequisite: PSAT 8 placement scores, Algebra Proficiency Test, and teacher recommendation.*

Accelerated Algebra I is an accelerated in-depth course which is designed to challenge the students. The course is designed for those students who have demonstrated exceptional mathematical ability. Students in this class must demonstrate initiative in studying and completing assignments outside of class. Topics covered in Accelerated Algebra include solving equations, inequalities, and systems, solving word problems algebraically, graphing on the coordinate system, simplifying expressions, factoring polynomials, rationalizing expressions, using functions and relations, and the quadratic formula.

### **Accelerated Geometry** Grade 9, full year (206)

*Prerequisite: PSAT 8 placement scores, Algebra Proficiency Test, and teacher recommendation.*

Accelerated Geometry is a mathematics course devoted mainly to plane geometry with some solid geometry and coordinate geometry. The use of algebra is incorporated throughout the course. Traditional proofs are studied based on geometric postulates and theorems. This course presents a more in-depth coverage of the topics of geometry and offers some additional enrichment topics not covered in the regular geometry course. Students in this class should have successfully mastered Algebra I and should have better than average mathematical aptitude. These students should have a high degree of self-motivation, good study habits, and the ability to work independently.

### **Algebra I** Grade 9, full year (205)

*Prerequisite: PSAT 8 placement scores and teacher recommendation.*

Algebra I is a traditional algebra course. Students recommended for this class may require a minimal amount of review over prerequisite algebra skills. Students should be able to master new material at a steady pace. Homework time will be available in class, however students will be expected to complete some work outside of the classroom. Topics covered in Algebra I include operations with real numbers, simplifying algebraic expressions, solving and graphing linear equations and inequalities, operations with polynomials, operations with rational expressions, solving systems of linear equations, and simplifying radicals.

### **Algebra II** Grades 11, full year (222)

*Prerequisite: Geometry or Integrated Algebra/Geometry 3*

This course provides the tools to expand and build on the fundamental skills learned in first-year algebra. The real number system is studied in great detail. Algebra and coordinate geometry are used to study functions and relations. Problem solving strategies are introduced to solve real world situations. Students completing this class should be able to identify, analyze, and solve problems using algebraic equations, inequalities, functions, and their graphs. Additional topics covered include methods of data collection and analysis and the study of probability.

### **Contemporary Mathematics** Grades 12, Elective, one semester (235), Dual Credit [JALC MAT 113]

*Prerequisite: Algebra II*

MAT 113 is a general education mathematics course which fulfills 3 hours of the core curriculum's mathematics requirement. Designed particularly for the non-science major, the course focuses on mathematical reasoning and solving of real-life problems, rather than on routine skills. Three or four of the following topics will be studied in depth: counting techniques and probability, game theory, geometry (additional topics beyond the prerequisite), graph theory, linear programming (including functions and graphs), sets and logic, mathematical modeling, the mathematics of finance, and statistics. This course requires the use of MyLab, an online interactive and educational system. This system requires the use of a computer and an internet connection. Students that are not able to finish work during class time will need to complete assignments using a computer with the internet, whether at school, at home, or at another location.

**Geometry**      Grades 10, full year (209)

*Prerequisite: Algebra I*

Geometry is a mathematics course devoted mainly to plane geometry with some solid geometry and coordinate geometry. The use of algebra is incorporated throughout the course. Traditional proofs are studied based on geometric postulates and theorems. Upon completion of geometry, students should have an understanding of proofs based on deductive reasoning, knowledge of geometric terms and concepts, and should be able to use their algebraic skills to solve problems in geometry.

**Honors Algebra II**      Grades 10-11, full year (223)

*Prerequisite: Geometry or Honors Geometry, application & teacher recommendation.*

Honors Algebra II is designed as a course that ranges from intermediate algebra through trigonometry. The topics covered in this class consist of all topics covered in Algebra II but in greater depth and breadth. In addition, a three-unit course in trigonometry is taught during the 2nd semester. A pre-requisite is Honors Geometry or recommendation from the student's Geometry teacher with departmental approval. Students in this class must have successfully completed Geometry and should have better than average mathematical aptitude. These students should have an ability to work independently.

**Honors AP Calculus**      Grade 12, full year (234)

*Prerequisite: Honors Pre-calculus, application & teacher recommendation.*

Honors AP Calculus is a college level calculus course. The selection of topics meets the requirements of the syllabus of the College Entrance Examination Board for the AB and BC examination. Students in this class must have satisfactorily completed Honors Pre-calculus. Since this is a time demanding course, the student must be able to attend class regularly and be willing to work regularly and independently outside of class. Graphing calculators will be used extensively. Students are required to take the AP test given in May of each year.

**Honors Geometry**      Grade 10, full year. (212)

*Prerequisite: Algebra I or Accelerated Algebra I, application & teacher recommendation.*

Honors Geometry is a mathematics course devoted mainly to plane geometry with some solid geometry and coordinate geometry. The use of algebra is incorporated throughout the course. Traditional proofs are studied based on geometric postulates and theorems. This course presents a more in-depth coverage of the topics of geometry and offers some additional enrichment topics not covered in the regular geometry course. Students in this class should have successfully mastered Algebra I and should have better than average mathematical aptitude. These students should have a high degree of self-motivation, good study habits, and the ability to work independently.

**Honors Pre-Calculus**      Grades 11-12, full year. (230)

*Prerequisite: Honors Algebra II or Trig/Analytic Geometry, application & teacher recommendation.*

This course provides topics for a full-year course in elementary analysis. Careful mathematical development with emphasis on theory, method, and application gives students excellent preparation for future courses in calculus and linear algebra. A pre-requisite is Honors Algebra II or recommendation from the student's Trig/Analytic Geometry teacher with departmental approval. Students in this class should have a high degree of self-motivation, good study habits, and the ability to work independently as well as in group situations.

**Integrated Algebra/Geometry 1 (IAG1)**      Grade 9, full year (203)

*Prerequisite: PSAT 8 placement scores, teacher recommendation*

This integrated course of algebra and geometry will incorporate calculator work and activities to help students better understand algebraic and basic geometry concepts. Students recommended for this course should have an understanding of the basic math skills. However, additional review of prerequisite skills will be provided. Calculator usage will be allowed at all times. Students who have weak study skills or who need additional individualized instruction will benefit from this class. Daily work is emphasized with most work done in the classroom. Students will take Int. Alg/Geom 2 the following year. The course counts for one high school credit. Topics covered in Int. Alg/Geom 1 include data collection, algebraic expressions, equations and inequalities, graphing, polynomials, measurement, and the Pythagorean Theorem.

**Integrated Algebra/Geometry 2 (IAG2)**      Grade 10, full year (210)

*Prerequisite: Integrated Alg/Geom 1*

The prerequisite for this course is Int. Alg/Geom 1. Calculator usage will be allowed at all times. Students who have weak study skills or who need individualized instruction will benefit from this class. Daily work is emphasized with most work being done in the classroom. Completion of assignments begun in class will constitute the majority of homework. The course counts for one high school credit. Topics covered in Int. Alg/Geom 2 include exponents, solving equations and inequalities, coordinate geometry, polynomials, systems of equations and right triangle trigonometry.



**Integrated Algebra/Geometry 3 (IAG3)** Grade 11, full year (213)

*Prerequisite: Integrated Alg/Geom 2*

The prerequisite for this course is Int. Alg/Geom 2. Calculator usage will be allowed at all times. Students who have weak study skills or who need individualized instruction will benefit from this class. Daily work is emphasized with most work being done in the classroom. Completion of assignments begun in class will constitute the majority of homework. The course counts for one high school credit. Topics covered in Int. Alg/Geom 3 include solving linear equations, systems of equations and inequalities, equations of lines, factoring, quadratic equations, congruent triangle relationships, similar figures, properties of parallelograms, perimeter, area of two and three dimensional figures and volume.

**Introductory Statistics** Grades 12, Elective, one semester, Dual Credit [JALC MAT 120] (236)

*Prerequisite: Algebra II*

This course covers the basic concepts of statistics and probability with the emphasis on computer usage and applications. This is a one-semester course. Students completing this course will have experience with probability and statistics on both a theoretical and practical level. The mathematical concepts will be discussed and utilized, while the applications and projects will provide concrete examples of their use. This course requires the use of MyLab, an online interactive and educational system. This system requires the use of a computer and an internet connection. Students that are not able to finish work during class time will need to complete assignments using a computer with the internet, whether at school, at home, or at another location.

**Transitions to Quantitative Literacy and Statistics** Grade 12, Elective, full year (239)

*Pre-requisite: Completion of the 3-year math requirement and teacher recommendation.*

This senior elective math course is designed to prepare and transition students directly into college and career pathways requiring general education college math competencies in quantitative literacy and statistics. Upon completion, students should be able to demonstrate proficiency and understanding in basic numeracy competencies in whole numbers, integers, fractions, and decimals, use estimation and explain/justify estimates, apply quantitative reasoning to solve problems involving quantities or rates, use mathematical summaries of data, such as mean, median, and mode, use and apply algebraic reasoning as one of multiple problem-solving tools, and use functions and modeling processes. The course will be delivered through problem-based instruction designed to build mathematical conceptual understanding and critical thinking skills. There will be extensive use of EXCEL and other statistical software.

**Trigonometry/Analytic Geometry** Grades 12, full year (231)

*Prerequisite: Algebra II. Students with less than a C average in previous math courses may lack some of the prerequisite skills needed for this class.*

Trigonometry/Analytic Geometry presents a complete course in pre-calculus. It is designed for average and above average students who would like to prepare for college or simply to study more mathematics. Students completing this course should be well prepared for beginning a successful college mathematics curriculum. Many of these students will competently enter a calculus program during their first year of college.

# ***PHYSICAL EDUCATION***

## **Physical Education-Freshman Curriculum** Grade 9, Required (unless enrolled in Athletic PE) (901)

The fundamental purpose of the freshmen physical education course is designed to help all learners become informed decision makers capable of planning for enjoyable lifetime fitness and physical activity while at the same time achieving personal fitness and activity goals for the present. According to the US Center for Disease Control and Prevention (CDC) physical activity has an impact on cognitive skills such as concentration, retention of information, and attention, and it also enhances classroom attitudes and behaviors, all of which are important components of improved academic performance. Upon completion of this course students will accomplish these main objectives:

1. Students will learn how to apply training principals--frequency, intensity, time, and type (FITT)--to achieve their personal fitness goals. Fitness expectations for students will be established on an individual basis; realistic goals will be based on the health related components of fitness. By learning and applying these concepts, students can develop lifelong understanding and good habits for overall health and fitness.
2. Students will participate in physical activities that involve competency in a wide range of motor, non-motor, and manipulative skills. Through these activities students will learn how to follow directions and rules that enhance enjoyment and success in both recreational and competitive sports. Students will work toward higher levels of competence thus learning how to maintain health and fitness as individuals and as members of a team.
3. Students will participate in state mandated fitness testing which will assess their current health related fitness level and will serve as a valuable tool to help them become an independent decision maker who can plan his or her own fitness program.
4. Students will learn the twelve major muscle groups in the body and how to perform exercises that will work toward improving their muscular strength and endurance.

## **Athletic PE Freshman Strength Training** Grade 9, Required (unless enrolled in Freshman PE) (9011)

This course is available during 6th hour for athletes in season who have to leave school early for team/individual competitions. The freshmen course is geared more specifically with an athlete in mind and includes an introduction to strength training.

## **Physical Education-Sophomore, Junior, and Senior Curriculum** Grades 10-12, Required

The following one semester units are available until the class is filled. Each unit has a maximum number of students and once that maximum is reached, you must select a different activity unit. After completing the freshman physical education curriculum, a freshman student may request another physical education class, with the approval of the instructor.

### **Adventure/Outdoor Education** (914)

This course will offer individual and cooperative activities built around team building, individual and team challenges, and trust activities. Rock climbing and belaying skills utilizing the climbing wall, along with principles of orienteering and hiking/camping will be offered in this class. Other outdoor skill related activities will be included, such as archery and outdoor cooking. Emphasis will also be placed on improving students' cardiovascular endurance. Fitness assessments/goal tracking will be done throughout the semester.

### **Personal Fitness** (917)

This course will provide the opportunity for the introduction, discussion and practice of various ways that individuals can get fit and stay fit. Many different types of workouts will be offered, including, but not limited to: active games, circuit training, martial arts, self-defense, jump rope, walking/jogging, interval training, core body strength, hand weights, medicine balls, therabands, plyometrics, exercise balls, hip hop aerobics, Zumba and more. A nutrition and activity journal will be kept with progression and achievement visible to the student. Fitness assessments/goal tracking will be done throughout the semester to check improvement. Journals, nutrition, stress, and activity logs may also be kept and analyzed. A good work ethic and a desire to get fit is a must for this class.

### **Strength Training** (916)

This class is designed with the multi-sport athlete in mind. A program using compound lifts and multi-lifting styles will be implemented in the weight room. A variety of speed, power, agility, reaction and quickness exercises will also be part of the program. While athletes are given first opportunity for enrollment any student may join the class. Fitness assessments/goal tracking will be done throughout the semester.

### **Team Sports** (912)

Games included in this class will be selected from a variety of the following activities: ultimate Frisbee, flag football, basketball, volleyball, eclipse ball, table tennis, team handball, volley tennis, four corner volleyball, lacrosse, floor hockey, tchoukball, and korfball. Team-building activities may also be included. Units are approximately three weeks in duration on Monday, Wednesday, and Friday. Cardio training with the use of heart rate monitors will be offered on Tuesday and Thursday. Development of sportsmanship, cooperation, leadership, and personal fitness are goals of this unit.

**Athletic PE Strength Training (926)**

This course is available during 6th hour for athletes in season who have to leave school early for team/individual competition. Students must have been a team member the year prior to be considered for entry into this athletic course.

**Waivers/Substitutions**

Students may request a P.E. waiver if they are: enrolled in Marching Band; a 9<sup>th</sup>-12<sup>th</sup> grader who is an active member of a CCHS Sports Team(during the semester of the sport only); an 11<sup>th</sup> or 12<sup>th</sup> grader who is enrolled in all academic classes that are required for graduation from high school, provided that failure to take such classes will result in the student being unable to graduate; a student that is enrolled in OJT, only if all other classes taken are required for graduation (a student must not be enrolled in any non-credited classes, including Study Hall and TA); an 11<sup>th</sup> or 12<sup>th</sup> grader who is enrolled in classes that are required for admission to the college or university they plan to attend, provided that the student is not taking an elective class; a student who must utilize the time to receive special education support and services as indicated in their Individualized Education Plan (I.E.P.); a student who has a medical condition, which prohibits participation in Physical Education as verified by their physician's written statement/request. A *Student Request for Physical Education Waiver* and any supporting documents and/or signatures must be completed by the student and submitted to the Counseling Department before a PE waiver will be considered. Substitutions for PE will be given to students for Health when taken the freshman year and Drivers Education when taken their sophomore year; the submission of a waiver is not necessary.

## **SCIENCE**

### **COURSE OFFERINGS**

<b>Freshman</b>	<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>
Accelerated. Biology Biology I Botany & Agricultural Science	Biology I Botany & Agricultural Science Botany & Horticulture 2 (GPFD) Chemistry I Conservation Biology Physical/Earth Science Principles of Tech I	Anatomy & Physiology Biology I Biology II/Genetics Biology II/Microbiology Botany & Agricultural Science Chemistry I Conservation Biology Forensics Physics Principles of Tech I, II Zoology/Veterinary Tech	Anatomy & Physiology Biology II/Genetics Biology II/ Microbiology Botany & Agricultural Science Botany & Agricultural Science 2 Chemistry I Conservation Biology Forensics Physics Principles of Tech I, II Zoology/Veterinary Tech

### **Honors Science Classes**

<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>
Honors Chemistry I	Hon/AP Biology II Honors Bio II Genetics Honors Bio II Microbiology Hon/AP Chemistry II Hon Physics I Hon/AP Environmental Science	Hon/AP Biology II Honors Bio II-Genetics Honors Bio II-Microbiology Hon/AP Chemistry II Hon/AP Physics II Hon/AP Environmental Science

Students are required to take Biology at the freshmen level and Physical Earth Science or Chemistry at the sophomore level. Honors Courses are designed for students who have demonstrated exceptional science abilities and are highly motivated and highly verbal. Admission to honors classes will be through class performance (students must maintain, both semesters, an 80% or above in an honors course or 93% or above in current non-honors course), application, and departmental approval. Any student earning a semester grade of a C or below may not be eligible to continue in the honors science program. Honors and accelerated science students are required to do an independent research project. Students who choose to withdraw from an honors class are not guaranteed placement in honors classes the following year.

#### **Accelerated Biology**      Grade 9, full year (411)

*Prerequisites: PSAT 8 test scores and teacher recommendation. A student in this class should have a science aptitude, the ability to work independently, think logically and critically, and be highly motivated.*

This course offers an introductory understanding of biological concepts concerning the exploration of life forms related to everyday life utilizing the inquiry method of learning and many laboratory activities. Students are expected to perform independent projects at home and work cooperatively in class to complete projects.

#### **Anatomy & Physiology**      Grades 11-12, Elective, semester (424)

*Strongly recommended to be taken in conjunction with Health Occupations*

*Prerequisites: Biology I with a C or better, Chemistry is strongly recommended.*

This course covers many biological concepts with reference to the human organism. This course is intended for all students interested in further study in biology and/or medical fields such as nursing, surgery, lab research, medicine, physiotherapy, etc. The course emphasis is on anatomy and physiology of the human body and how the body works together to maintain homeostasis. Laboratory investigations emphasize a problem-based learning approach as students run diagnostic tests on four hypothetical patients, diagnose those patients according to test results, and develop a prognosis of treatment.

#### **Biology I**      Grade 9, full year (402)

Biology I is designed to convey an understanding of biological concepts involving the human body, similarities and diversities of living organisms in general, their relation to the environment, the use of scientific inquiry in the study of and comprehension of life and approaches to solving problems of a biological and ecological nature. Emphasis is placed on lecture, discussion, demonstration, use of textbooks, homework and laboratory experiences. Topics covered include: diversity of living things, evolution, chemical background for biology students, the cell, reproduction and development, genetic continuity, systems of energy utilization in plants and animals, relationships of living things with their environment, conservation, the scientific method of study, lab technique and safety in the lab, the use of reference sources and current issues related to biology.

**Biology II/Genetics (Honors Genetics)** Grades 11-12, Elective, semester (421,444)

*Prerequisite: Biology I with a C or better. Honors class requires application and department recommendation.*

This class explores the large, continually developing field of heredity. Students will engage in an in depth study of how traits are inherited in plants, animals and humans. This class will focus on a variety of genetics topics, including cell division, human inheritance and genetic disorders, karyotypes and pedigree analysis, DNA analysis and gel electrophoresis, biotechnology and genetic engineering. Critical thinking and problem solving skills will be developed and enhanced through a variety of hands-on activities and laboratory exercises. *Honors credit requires an independent project.*

**Biology II/Microbiology (Honors Microbiology)** Grades 11-12, Elective, semester (422,445)

*Prerequisite: Completion of Biology and Chemistry (or concurrent enrollment) with a grade of B or better. Honors class requires application and department recommendation.*

Microbiology explores the world of tiny organism and viruses. Students will spend the semester engaged in a variety of laboratories and hands-on activities that will help prepare them for any health occupation or liked science career. Students will learn a variety of concepts, including classification of microbes (bacteria, viruses, protozoa, helminthes, and fungi, microbial metabolism, disease causing pathogens, human diseases, and microbes in the environment. *Honors credit requires an independent project.*

**Botany & Agricultural Science** Grades 9 -12, Elective, full year, Early Bird (417)

*Prerequisites: Completion of or concurrently enrolled in another science class.*

This course is designed to introduce students to the agricultural industry and provide them with basic plant science botany. This is a laboratory based class which includes lectures, discussion, and projects. Major units of instruction include plant physiology, plant anatomy, sexual reproduction, asexual reproduction, Earth science, vertebrate & invertebrates, animal physiology, hydroponics, plant identification, growing greenhouse crops, floral design and biotechnology. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is optional.

**Botany & Agricultural Science II (Greenhouse & Floral Production)** Grades 11-12, Elective, full year, Early Bird (4172)

*Prerequisites: Having completed a full year of Botany & Agricultural Science*

This course focuses on the greenhouse management, floral design and related segments of the horticulture industry. Major units of study include floriculture plant identification, greenhouse structures, hydroponics and the culture of greenhouse crops. Also included are care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. Agribusiness units will be introduced in merchandising, advertising, sales, and operating a retail floral business. Participation in FFA is optional

**Chemistry I** Grades 10-12, Elective, full year (431)

*Prerequisites: To take Chemistry as a sophomore, students must have a B average both semesters in Biology and complete Algebra I with a B average both semesters. To take Chemistry as a junior or senior, students must complete Algebra I with a C average both semesters. A scientific calculator is required.*

Chemistry is the study of chemical reactions. First semester includes the Atomic Theory, Periodic Trends, Measurement, Bonding, Nuclear Interactions, and Balanced Reactions. Second semester focuses on Gas Laws, Acids/Bases, Organic and Petrochemicals, Water and Solutions, Electrochemistry, and Nutrition. Inquiry labs, problem solving and critical thinking are emphasized. The course is designed to make real world connections and applications to the central science of chemistry.

**Conservation Biology & Natural Resources Management** Grades 10-12, Elective, full year (414)

*Prerequisites: Completion of one Science classes with a passing grade. As a sophomore, must be taken concurrently with Physical Earth Science or Chemistry.*

This course develops management and conservation skills in understanding the connection between agriculture and natural resources. This is a laboratory and inquiry based class that includes lectures, discussion, and projects. Student knowledge and skills are developed in making connections between environmental sciences and applying those concepts for problem solving, understanding natural resources and its importance, fish, wildlife, and forestry management and conservation, and exploring outdoor recreational enterprises. Hunting and fishing as a sport, growing and managing tree forests, and outdoor safety education will be featured.

**Forensics** Grades 11-12, Elective, one semester (416)

Forensics applies various fields of science to crime-based problem solving techniques. A problem based learning approach enables students to understand the science behind crime scene investigation. The lab intensive class uses key biology, chemistry, and physics concepts to illustrate many of the tests performed in a forensics crime lab. Some of the many activities include the physics of blood spatter, various types of DNA analysis including gel electrophoresis, fingerprint analysis with both physical and chemical processes, and the microscopic analysis of hair and fibers. Critical thinking skills, cooperative learning and problem solving will be emphasized through lab work, large and small group work and classroom discussions.

**Honors AP Biology II** Grades 11-12, Elective, full year (413)

*Prerequisites: Biology and Chemistry, application and department recommendation*

Four big ideas and seven science practices are integrated throughout the biology curriculum. A series of student-directed inquiry based laboratory investigations allow students to generate meaningful questions, design experiments, and analyze scientific evidence. Regular field trips to labs at SIUC and Fish Hatchery are a part of the curriculum. This college level course prepares the students for the AP Biology exam and credit towards future college degrees. Students are required to take the AP Biology Exam in May.

**Honors AP Chemistry II** Grades 11-12, Elective, full year (433)

*Prerequisites: Honors Chemistry I and Algebra 2 with a B or higher, application and department recommendation.*

Topics: First semester is an in depth study of Bonding, Stoichiometry, Molecular Geometry, States of Matter, Thermodynamics and reactions. Second semester topics focus on Kinetics, Equilibrium, Acids/Bases, Electrochemistry, Organic and biochemistry. Inquiry labs are an integral part of the class. A college AP chemistry textbook is used. Students are required to take the AP Chemistry Exam in May. A scientific calculator is required.

**Honors AP Environmental Science (415) (Dual Credit, JALC PHS101 & PHS 111)** Grades 11-12, Elective, full year

*Prerequisites: Biology, Chemistry and Algebra I recommended, application and department recommendation. Students will receive 6 hours of APES dual credit from JALC.*

Topics: The environmental sciences show us how the Earth's systems function and how we influence these systems. First semester includes our Human footprint, Population, Biomes, Ecosystem diversity, Bio-geochemical cycles, Agriculture, Land Uses and Global Economics. Second semester focuses on Tectonics, Atmospheric science, water uses, energy resources, pollution, toxicology, and global changes. Inquiry labs and researching current environment issues are also integral components to this class. A university approved AP Environmental Sciences textbook is used. Students are encouraged to take the AP Environmental Science exam in May. This class is also offered for dual credit with JALC 3-6 semester hours.

**Honors AP Physics I (443)** Grades 11-12(grade 10 with consent of instructor), Elective, full year

*Prerequisites: Concurrent enrollment in Honors Algebra II with the ability to maintain a B or higher, application and department recommendation. Trigonometry is recommended. (Students who successfully complete Conceptual Physics with an A and with instructor approval may take this class.)*

General course description is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. There will be an element of calculus interjected into the course for those students interested in taking the C exam. This course adheres to the guidelines as outlined by The College Board ([www.collegeboard.org](http://www.collegeboard.org)). This course is recommended for highly motivated, high ability students who intend to pursue post-secondary degrees in mathematics, engineering, or any of the pure sciences. The book for this course is an AP approved book. Students will be required to purchase an AP Physics supplemental book in an effort to better prepare for the AP Exam. It is required that students enrolled in this course, take the AP Exam.

**Honors AP Physics II** Grades 11, 12, Elective, full year (4431)

*Prerequisites: Student must have completed Honors AP Physics I with a B or higher, application and department recommendation.*

Honors AP Physics II is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. This course adheres to the guidelines as outlined by The College Board ([www.collegeboard.org](http://www.collegeboard.org)). There will be an element of calculus interjected into the course for those students interested in taking the C exam. This course is recommended for highly motivated, high ability students who intend to pursue post-secondary degrees in mathematics, engineering, or any of the pure sciences. The book for this course is an AP approved book. Students will be required to purchase an AP Physics supplemental book in an effort to better prepare for the AP Exam. It is required that students enrolled in this course, take the AP Exam.

**Honors Chemistry I** Grades 10-12, Elective, full year (432)

*Science prerequisite: Completion of Accelerated Biology, with B average both semesters, or Biology with 93% both semesters, application and department recommendation. Math prerequisite: Completion of Algebra I with an A or Accelerated Algebra with a B average.*

Honors Chemistry is the study of the composition, structures and changes of matter. This is a rigorous, math intensive course that works at an accelerated rate and goes into chemistry and its numerous applications in greater depth. Topics covered include matter, atomic theory, quantum mechanics, chemical bonding, compound naming, stoichiometry, gas laws, electrochemistry, oxidation-reduction reactions, and acids and bases.

**Physical/Earth Science** Grade 10, full year (401)

This course provides an introduction to the major branches of physical science: chemistry, earth science and physics. Major concepts and relationships will be explored by developing critical thinking skills through numerous laboratory activities, lecture, class discussions, and assignments/projects.

**Physics** Grades 11-12, Elective, full year (441)

*Prerequisites: Algebra I and Geometry or concurrent enrollment in Geometry.*

Physics is the study of the nature of matter and energy and how they are related. The course consists of an organized sequence of units, including: motion, forces, machines, sound, light, thermal energy, magnetism, electricity, astronomy, and atomic theory. Concepts are stressed using mathematics as the language of physics. Students take notes, work problems, and participate in demonstrations, labs and small group activities. Physics is highly recommended for any student who plans to pursue higher education, post-secondary training in any science related area of study, or who wants to be able to make informed decisions in an increasingly technological world.

**Principles of Technology I** Grades 10-12, Elective, full year (622)

This course is an applied physics course based on the application of principles in mechanical, fluid, electrical and thermal systems. The course is heavily oriented in laboratory work with half of the course concentrating on problem-solving math labs and hands-on hardware labs. Some of the units covered are: Force, power, energy, resistance, rate and work. Principles of Technology addresses the practical use of various units explained previously. It is not required but it is strongly suggested that Algebra I be taken prior to this class. This class is taught as a CTE class and qualifies as a science credit.

**Principles of Technology II** Grades 11-12, Elective, full year (623)

*Prerequisite: Principles of Technology I*

Principles of Technology is an applied physics course based on the technology concepts of Momentum, Waves and Vibrations, Energy Convertors, transducers, Radiation, Light and Optical Systems and Time Constants. The course is heavily oriented in laboratory work with half of the course concentrating on problem-solving math labs and hands-on hardware labs. This course continues where Principles of Technology I left off. This class is taught as a CTE class and qualifies as a science credit.

**Zoology & Veterinary Technology** Grades 11-12, Elective, full year (418)

*Prerequisite: Completed two years of science with C average.*

This is a laboratory based course which includes lecture, discussion, and projects. Students will explore the biochemical processes of living organisms and be able to apply those concepts to the whole organisms. These topics include studying the nervous, immune, endocrine, respiratory, and circulatory systems of vertebrates. In addition, this course will develop students' understanding of the small and companion animal industry, animal anatomy and physiology, animal ethics and welfare issues, animal health, veterinary medicine, veterinary office practices, and animal services to humans. Career exploration will focus on veterinarian, veterinary lab technicians, office lab assistant, small animal production, research lab assistant, and animal nutrition lab technician. Improving computer and workplace skills will be a focus. Participation in FFA is optional.

## ***SOCIAL STUDIES***

### **African American History**      Grades 10-12, Elective, full year or semester (356)

African American History is designed to give students the opportunity to explore topics only briefly touched on in American History. The first semester will include African American History from the 15<sup>th</sup> century to 1865. It deals with West African Kingdoms, the Atlantic slave trade, and the institution of slavery in Africa and the Americas. The themes of struggle, resistance, and survival will be studied through culture, art, music, and literature. The second semester will include African American History from 1865 to the present. It begins with the post-Civil War Reconstruction period and the rise of African American political power. African American business success following Reconstruction will be evaluated, with emphasis on the philosophies of Booker T. Washington and W.E.B. Dubois. The course will also address African American military service from the 19<sup>th</sup> century to the present. The second semester will continue the study of cultural developments in art, music, and literature.

### **U.S. Government**      Grade 12, Required, semester (Fall semester only) (321)

This course examines the organization of our national government and the United States political system. In order to prepare students for the United States Constitution Test, as required by state law, the class will cover the foundations and institutions of the government of the United States. Students should be prepared to take notes and read textbook assignments. The state requirements of the study and successful completion of the United States Constitution Test is met by this course.

### **U.S. History**      Grade 11, Required, full year (311)

The course is a chronological coverage of American History. First semester covers discovery of the New World up to the Industrial Age. Second semester emphasis is on comprehensive coverage of the twentieth century. With regards to state mandates the classes will include coverage of women, minorities, unions, and Illinois History.

### **Civics**      Grade 12, Required, Semester (Spring semester only) (322)

This second semester course will involve the discussion of current and controversial issues, service learning, and simulations of the democratic process and include units on Civil Liberties, Civil Rights, Foreign Policy, Political Parties and Elections, and State and local Government. The state requirements of the study and successful completion of the Illinois Constitution exam and the display of the flag are met by this course.

### **Honors AP Government, Politics, & Civics**      Grade 12, optional, full year. (325)

*Prerequisites: Admissions based on academic achievement, teacher recommendations, and aptitude for Social Studies.*

This course is designed to provide students with a thorough understanding of the foundations of the United States government, its institutions, the formation of public policy, and the fundamentals of civic engagement. Students must be willing to commit themselves to AP level coursework which is intended to reflect the rigor of a college level class in both assignments and assessments. There will be a heavy emphasis on reading and analyzing primary sources such as Supreme Court cases and foundational documents, in addition to the discussion of current and controversial issues. Students will also be expected to learn the skills necessary for success on the AP exam, such as data analysis, and how to create an argumentative essay. The state requirements of the study and successful completion of the United States Constitution Test and Illinois State Constitution Test are met by this course. In addition to normal course work, students are expected to participate in several projects and activities. Students are required to take the Advanced Placement exam in May.

### **Honors AP United States History**      Grade 11, Optional, full year. (312)

*Prerequisites: Admissions based on academic achievement, teacher recommendations, and aptitude for Social Studies.*

This course is designed to give the students a thorough understanding of the history of the United States. Course expectations for the history of the United States include areas focusing on: Politics, Economics, Religion, Society, Inventions and Industry, and Arts and Education. This course will require the ability to analyze and interpret many different areas of our country's history and extensive outside reading of primary sources. Students must be willing to commit themselves to AP level coursework which is intended to reflect the rigor of a college level class in both assignments and assessments. In addition to the assigned coursework, students will have to choose and research a subject that corresponds with the National History fair theme and present their findings at the regional fair in April. Students will be using Advanced Placement materials throughout the year and are required to take the AP exam in May.

### **Honors AP World History: Modern**      Grade 10, Optional, full year. (316)

*Prerequisites: Admissions based on academic achievement, teacher recommendations, and aptitude for Social Studies.*

This course is designed to help students develop analytical skills and acquire knowledge necessary to deal critically with issues and events in World History. The course focuses on the development of people and societies from 1200 CE to the present day. Themes emphasized include, but are not limited to the political, economic, and social organization of specific societies, and their interaction with other societies. Students must be willing to commit themselves to AP level coursework which is intended to reflect the rigor of a college level class in both assignments and assessment. Students are required to take the Advanced Placement exam in the spring.



**Human Geography** Grades 9-10, Elective, semester (Spring semester only) (317)

This one semester course will focus on the "micro" viewpoint of Geography - People and Cultures. Units will be divided geographically and over the course of a semester, students will learn, analyze, and compare people, cultures, traditions, and religions of the world.

**Sociology** Grades 11-12, Elective, semester (349)

Sociology is the study of groups and group behavior in society. The course includes an examination of the following topics: culture, social values, socialization; how individuals behave in groups; attitudes and changing attitudes; abnormal behavior in society and its treatment; social problems of present day American Society. Students explore the major sociological perspectives, society and culture, social stratification, social institutions, and social change. The class utilizes a myriad of different activities, readings, and assessments to investigate and understand the society within which we live.

**Psychology** Grades 11-12, Elective, semester (350)

Psychology is a survey course for juniors and seniors, which includes the study of biological, social and cognitive causes for behavior. Although the material may vary from year to year, the course emphasizes the role of the brain in cognitive functioning, memory, developmental psychology, personality theory and mental illness. Students are strongly encouraged to participate in discussion.

**World Geography** Grades 9-10, Elective, semester (Fall semester only) (318)

This one semester course will take the "macro" viewpoint of Geography, with students learning, analyzing, and comparing both political and physical geography. Units will be divided up geographically, and over the course of the semester, students will engage in a curriculum that will focus on nations; cities, trade, alliances, natural resources, physical geography, and the mastery of GIS Technologies. (Geographic Information Systems).

**World History** Grades 10-12, Elective, full year or semester (315)

The course will emphasize the contributions of past societies and cultures on our present life. First semester will include a study of early- cultures throughout the world to show their contribution to our heritage and the interdependence of modern nations and cultures. The second semester will include material on present day cultures and civilizations. Films, speakers, tapes and recordings will be utilized to supplement regular classroom assignments.

## ***SUPPORTIVE INTERVENTIONS***

### **Academic Support** Grades 9-12 (156, 1561)

*Prerequisite: Placement determined by the Teacher Assessment Team or Individualized Education Plan Team.*

This class is designed to provide support to CCHS students who need assistance with completing academic tasks, organizational skills, and test taking skills. It is designed to provide remediation and enrichment for Math and Reading skills. This class will focus on teaching students how to enhance their learning. Students will set weekly goals, be responsible for completing content area assignments, and complete reading and math tasks from an individualized online program.

### **Achievement through Technology (AT)** Grade 9, full year.

*Prerequisite: Concurrent enrollment in Algebra I, PSAT 8 placement scores, and teacher recommendation.*

AT is a class designed to help students who are currently enrolled in Algebra I. Emphasis is placed on topic comprehension, homework completion, reviewing for quizzes and tests, and study skills specific to mathematics.

### **Advanced Achievement through Technology (AAT)** Grade 11, full year.

*Prerequisite: Concurrent enrollment in Algebra II, standardized test scores, and teacher recommendation.*

AAT is a support class for students enrolled in Algebra 2. The primary focus is to improve math skills with an emphasis on Geometry and Advanced Algebra through activities in the classroom and computer lab. Preparation for standardized testing, that is required for all juniors, is also an integral part of class.

## ***READING***

### **Reading Lab 1 A & B** (1501, 1502) Grade 9. May be required up to a full year.

*Prerequisite: Eight grade students who score below the 55<sup>th</sup> percentile on the PSAT 8 Reading Test or other standardized reading test may be required to take this class.*

This class is designed to improve all aspects of literacy skills. The aim of the curriculum will be to augment the performance of literacy skills specifically content area reading, vocabulary, fluency, critical thinking, and comprehension strategies. This enhanced course of action will ensure that high school students have opportunities to read with competence, confidence, and understanding. In addition, this literacy encompasses the ability to master, construct and generalize the meaning from the content to other learning situations by utilizing high interest and nonfiction text. The skills acquired in this course support core area classes.

### **Reading Lab 2** (1511) Grades 10. Elective. May be recommended up to a full year.

*Prerequisite: This class is recommended for those students taking English 2, level 3 and/or who score at or below the 35<sup>th</sup> percentile on the 9<sup>th</sup> grade PSAT 8 Reading Test. It is also recommended for sophomores, who score between the 36<sup>th</sup> and 55<sup>th</sup> percentiles, and whose delayed reading skills may be preventing positive academic results.*

This course is designed to improve all aspects of literacy skills. Critical thinking together with a rigorous level of text complexity will be the goal for this reading course. The guiding principle is to reinforce and enhance the process of reading in comprehension for different mediums and larger portions of text.

### **Transitional English (ESL Level 1 and 2)** Grades 9-12, Elective, full year (154, 155)

These courses are offered only to foreign students who are unprepared to cope adequately with classroom English. An integrated language arts approach is employed to teach English grammar, reading, and composition. Oral fluency is encouraged with classroom discussions and presentations, while pronunciation and accuracy are practiced with minimal pair, intonation, and pattern drills. Supplementary audio-visual materials such as audio-tapes, films, self-directed computer instructions, newspapers, and magazines are used. Students who are scheduled into this class will not ordinarily take the regular English class. Transitional English meets graduation requirements.

# **WORLD LANGUAGES**

**American Sign Language I** Grades 11-12, Elective, Semester, Dual Credit (ASL I – 4)  
See Off Campus-Dual Credit Classes for Course Description.

**American Sign Language II** Grades 11-12, Elective, Semester, Dual Credit (ASL II – 4)  
*Prerequisite: ASL I with a grade of C or better*  
See Off Campus-Dual Credit Classes for Course Description.

**French 1** Grades 9-12, Elective, full year  
French 1 provides a "balanced-skills" approach to French learning; there is an "audio-lingual" approach in that listening and speaking skills are stressed. Students develop oral skills through exercises in pronunciation, listening comprehension and dictation. Reading and writing skills are also developed so that the student acquires a balance of skills simultaneously. Textbooks are accompanied by workbooks, which reinforce the learning. The audio and video components of the program feature native French speakers and are used to reinforce communication. French culture is taught as an integral part of each lesson.

**French 2** Grades 10-12, Elective, full year  
*Prerequisite: Grade of C or better in French 1 or proficiency.*  
French 2 continues the "balanced-skills" approach of French 1. While stressing the oral skills, French 2 provides abundant opportunity to develop further the skills of reading and writing so that the four skills of communication are intermingled. Students increase their vocabulary in as real a context as possible and are exposed to more advanced grammatical structures. The French 2 textbook is accompanied by workbooks, audio and video tapes. Culture pervades all components of each lesson: dialogues, readings and exercises in grammar.

**French 3** Grades 10-12, Elective, full year.  
*Prerequisite: Grade of C or better in French 2 or proficiency*  
French 3 continues to develop the communicative abilities of the student by reinforcing the skills acquired in the first two years. There is a continued emphasis on oral communication, vocabulary and grammar acquisition, and cultural understanding. When French 3 and 4 are combined, the French 3 curriculum is alternated each year with the French 4 curriculum.

**French 4** Grades 11-12, Elective, full year  
*Prerequisite: A grade of C or better in French 3 or proficiency*  
French 4 continues the process of acquiring the skills of communication. Reading centers on the history and culture of France, including extracts of works by great French authors. To facilitate reading, relevant vocabulary is presented and previously learned grammatical structures are reviewed while more advanced concepts are added. When French 3 and French 4 are combined, their curricula are alternated.

**Honors French 3, Honors French 4** Grades 10-12, Elective, full year.  
*Prerequisite: A grade of A in French 2, French 3 or proficiency An approved application is also required.*  
See French 3 and French 4 description above. For honors credit, extra work will be required in the form of a project to be presented to the class at the end of each semester. The projects focus on aspects of French culture chosen by the student and approved by the teacher.

**German 1** Grades 9-12, Elective, full year  
German 1 provides a sound basis for learning the German language as it is spoken and written today. Our Klett-Langenscheidt Portfolio Deutsch level 1 textbook series presents a modern approach to gaining communicative mastery by focusing on topics of particular interest of today's adolescents. The program series makes ample use of audio tapes, video tapes, and a variety of additional ancillary materials to enhance the presentations. The series provides a well-balanced treatment of the similarities and differences of the Germanic cultures of the reunited Germany, Austria and Switzerland.

**German 2** Grades 10-12, Elective, full year  
*Prerequisite: A grade of C or better in German 1 or proficiency.*  
German 2 continues building upon the fundamentals introduced in the German 1 program. The Klett-Langenscheidt Portfolio Deutsch level 2 textbook, presents a smooth transition toward more sophisticated linguistic constructions while providing constant recursion to past materials. The students enjoy their acquisition of more advanced communicative skills by being immersed in a multitude of varied proficiency-based activities. The text, audio and video-tapes and the many ancillaries provide reinforcement and make the whole program enjoyable for the learner.

**German 3** Grades 10-12, Elective, full year

*Prerequisite: A grade of C or better in German 2 or proficiency.*

This course continues building upon language acquisition by alternating instruction between grammar and literature. More sophisticated aspects of the language are stressed. The Klett-Langenscheidt Portfolio Deutsch level 3 textbook is used. Students are also introduced to selections of formal German literature, which includes radio plays, drama and short stories by well-known writers.

**German 4** Grades 10-12, Elective, full year

*Prerequisite: A grade of C or better in German 3 or proficiency*

This class is a continuation of the mastery of the German Language. Alternative materials will be used in the curriculum.

**Honors German 3** Grades 10-12, Elective, full year

*Prerequisite: A grade of A in German or proficiency. An approved application is also required.*

See German 3 description above. For honors credit, extra work will be required.-

**Honors German 4** Grade 11-12, Elective, full year

*Prerequisite: A grade of A in German 3 or proficiency. An approved application is also required.*

The course objective is to perfect the four skills of language learning: listening, speaking, reading, and writing. **Listening:** Students will view or listen to German television, radio, video, and Hörbucher (audio versions of texts). **Speaking:** The class will be conducted almost exclusively in German. In addition to daily class discussions, students will give oral presentations and speeches. **Reading:** Students read and respond to a variety of genres, including short stories, poetry, plays, novels, and current articles from German magazines and newspapers. **Writing:** Special emphasis will be placed on the development and refinement of students' essay writing skills. Students will also write journal entries, poetry, and prepare reports using Power Point or other media, and have the opportunity to do creative writing of their choice, such as play writing.

**Spanish 1** Grades 9-12, Elective, full year

Spanish 1 is a proficiency-oriented approach to communicating in Spanish. Emphasis will be on vocabulary building, listening and speaking activities, reading and writing activities and cultural understanding. Students will be provided opportunities to practice using Spanish in a range of contexts, to express themselves in Spanish, and to interact with other students in Spanish. Students will be exposed to a variety of materials to aid them in their beginning acquisition of the language. This may include technology, textbooks, workbooks, readers, audio and video resources, games, and other aids.

**Spanish 2** Grades 9-12, Elective, full year

*Prerequisite: A grade of C or better in Spanish 1 or Proficiency*

Spanish 2 reviews and expands the communication proficiency approach begun in Spanish 1. The emphasis continues to be on listening, speaking, reading, writing, and culture. Audio and Video tapes of native speakers will be used in the language lab to build language skills. More advanced grammatical concepts are presented and vocabulary building continues. Students will read and listen to edited short stories and poems, participate in skits, and give oral presentations.

**Spanish 3** Grades 10-12, Elective, full year [Dual Credit SPN 101, 102]

*Prerequisite: A grade of C or better in Spanish 2 or Proficiency*

Spanish 3 continues to build the communicative abilities of the student by reinforcing the skills acquired in the first two years. The study of grammar continues and is incorporated into the listening, speaking, reading and writing components of the course. Also, contingent upon successful completion, 4 hours of dual credit will be issued from John A. Logan College.

**Spanish 4** Grades 11-12, Elective, full year [Dual Credit SPN 201]

*Prerequisite: A grade of C or better in Spanish 3 or Proficiency*

Spanish 4 continues to expand on the speaking, listening, reading and writing skills the student has acquired. There is a continued emphasis on oral communication, vocabulary and grammar acquisition, and cultural understanding. Students will read and listen to a more varied selection of literature and will improve their speaking and writing skills through oral presentations and short compositions. Upon successful completion, students will receive 4 credit hours from John A. Logan College. These credits may be transferred to other universities.

**Honors Spanish 3** Grades 11-12, Elective, full year [Dual Credit SPN 101, 102]

*Prerequisite: A grade of A in Spanish 2 or Proficiency. An approved application is also required.*

See Spanish 3 above. For honors credit, extra work will be required. Enrollees must have a high level of motivation and interest, as well as sufficient time for class preparation. Contingent upon successful completion, 4 hours of dual credit will be issued from John A. Logan College.

**Honors Spanish 4** Grades 11-12, Elective, full year [Dual Credit SPN 201]

*Prerequisite: A grade of A in Spanish 3 or Proficiency. An approved application is also required.*

See Spanish 3 above. For honors credit, extra work will be required. Enrollees must have a high level of motivation and interest, as well as sufficient time for class preparation. Contingent upon successful completion, 4 hours of dual credit will be issued from John A. Logan College. These credits may transfer to other universities.

**AP Spanish 4** Grades 11-12, Elective, full year [Dual Credit SPN 201, 202]

*Prerequisite: Grade of A in Honors Spanish 3 or Proficiency. An approved application is required.*

This class further develops students' communication skills in Spanish, including listening, speaking, reading and writing. In addition to comprehending and producing language on a variety of topics, students will be able to analyze written articles and literature and produce written compositions. Students' transcripts will reflect their participation in an AP level course, and they will have the opportunity to take the Spanish Language AP exam in the spring. Students may earn college credit for AP Spanish, contingent upon their score on the AP exam. Enrollees must have a high level of motivation and interest, as well as sufficient time for class preparation. Audio tapes, as well as video will continue to be used to reinforce listening skills.

## **OFF CAMPUS - DUAL CREDIT CLASSES**

**American Sign Language I** Grades 11-12, Elective, Semester, Dual Credit (ASL I – 4)

*Prerequisite: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This dual credit course is designed for students interested in learning and developing basic American Sign Language skills, as well as, an understanding of the cultural aspects of the deaf community. Students will learn to communicate with deaf persons through finger spelling, signed words, and gestures. Course topics may also include becoming aware of issues facing the deaf population. ASL I, will be taught on the John A. Logan College campus. A grade of C or higher must be achieved to advance to ASL II.

**American Sign Language II** Grades 11-12, Elective, Semester, Dual Credit (ASL II – 4)

*Prerequisite: ASL I with a grade of C or better. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This dual credit course is a continuation of ASL I. It is designed to further develop communicative proficiencies through the use of American Sign Language skills at the intermediate level. It will extend students' ability to understand and express themselves, through written and manual execution of American Sign Language, and increase their vocabulary and speed. Students may also develop receptive and expressive proficiency by engaging in discourse for informative or social purposes. ASL II will be taught on the John A. Logan College campus.

**Automotive – Braking Systems** (Dual Credit AST 173) Grade 11-12, Semester, 1 Credit, 2 periods

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course provides instruction in hydraulic principles, brake lines and hoses, disc and drum brake components, and anti-lock braking systems.

**Automotive-Engine Repair** (Dual Credit AST 170) Grade 11-12, Semester, 1 Credit, 2 periods

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course is a study of the diagnosis and repair of cylinder heads and valve trains, short blocks, and lubrication and cooling system components. General engine diagnosis and engine completion and start-up procedures are also covered.

**Automotive- Fuel and Exhaust Systems** (Dual Credit AST 171B) Grade 11-12, Semester, 1 Credit, 2 periods

*Prerequisites: AST 171A. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course is a study of fuel and exhaust systems, including carburetion, fuel injection, and computer controlled fuel systems.

**Automotive-Ignition Systems** (Dual Credit AST 171A) Grade 11-12, Semester, 1 Credit, 2 periods

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course is a study of ignition systems, beginning with breaker point systems and covering the evolution through computerized ignition systems.

**Automotive - Introduction to Automotive Services** (Dual Credit AST 172) Grade 11-12, Semester, ½ Credit, 1 period

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course is a study of shop safety, shop operation, and career opportunities in automotive technology. Also covered are basic servicing techniques as applied to engine repair and automatic transmissions and transaxles.

**Automotive – Suspension and Steering** (Dual Credit AST 281) Grade 11-12, Semester, 1 Credit, 2 periods

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.*

This course is a study of suspension and steering system diagnosis, repair, and adjustment.

**Certified Nursing Assistance Program** (Dual Credit- NAD 101) Grade 11-12, Semester, 1 credit, 2 periods

*Students must take the Accuplacer exam and meet a minimal score requirement in Reading. Students must also have a 2-step TB test before beginning the class and submit to a Health Care Criminal Background Check at the student's cost of \$15. The off-campus course may be selected if the on-campus class is full or if the on-campus class conflicts with core classes in a student's schedule. Students must provide their own transportation if they take the class at John A. Logan College.*

The course is composed of a combination of subject matter and experiences designed to perform tasks of individuals receiving nursing services. The student learns those competencies needed to perform as a nurse assistant under the direction of the registered nurse. The units of instruction should include the role of the nurse assistant while covering general health care topics; medical

terminology; patients/clients and their environment; special feeding techniques; psychological support and, in long term and terminal illness, death and dying (e.g., chronically ill, children, new mothers, and so on); and all other basic nursing skills. Topics covered typically include normal growth and development; feeding, transporting patients, hygiene, and disease prevention; basic pharmacology; first aid and CPR; observing and reporting; care of equipment and supplies; doctor, nurse, and patient relationships and roles; procedure policies; medical and professional ethics; and care of various kinds of patients. In order to have an approved nurse assistant program (one in which the students are eligible to sit for the certifying exam) the program must be approved by the Illinois Department of Public Health.

**Welding- Acetylene Fusion** (Dual Credit WEL 150) Grade 11-12, Semester, ½ credit

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. **Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.***

This course is a study of oxy-acetylene equipment; production of gases, storage and distribution, types of flames, operator protective equipment, and general safety precautions. Joints welded will be the butt-joint and outside corner joint in the flat position.

**Welding -M.I.G.** (Dual Credit WEL 160) Grade 11-12, Semester, ½ credit

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. **Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.***

This course is a study of power sources, wire feeders, their maintenance and adjustment, and types of transfer, shielding gases, and flow meters. Emphasis will be placed on T joints in the horizontal and vertical down welding position and the butt joint in the flat and vertical down position. Also the study of electrode wires, shielding gases, flow meters, and accessory equipment will be discussed. Emphasis will be placed on the butt and T joint in the vertical P welding position and practice on the overhead T joint.

**Welding – Oxy-Acetylene Fusion** (Dual Credit WEL 151) Grade 11-12, Semester, ½ credit

*Prerequisites: WEL 150. Students must take the Accuplacer exam and meet a minimal score requirement in Reading. **Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.***

This course is a study of torch types, their construction and classification and specifications of gas welding rods. Joints welded will be the lap joint and horizontal tee joint. Also a study of the principles of joint design, their preparation, and control of expansion and contraction will be discussed. Joints welded will be the butt and T joints in the vertical and overhead positions.

**Welding - T.I.G.** (Dual Credit WEL 162) Grade 11-12, Semester, ½ credit

*Prerequisites: Students must take the Accuplacer exam and meet a minimal score requirement in Reading. **Students must provide their own transportation to John A. Logan College. Student is responsible for any fees charged by JALC.***

This course is a study of power sources, torch assemblies, electrode types, shielding gases, and types of current used on different metals. Emphasis will be placed on butt and T joints in the flat, horizontal, overhead, and vertical positions.

**NCAA APPROVED COURSES AT CCHS**

**English**

English 1	English 3	Honors English 4	Speech
English 2	Honors English 3	Creative Writing	Advanced Speech
Honors English 2	English 4	Shakespeare	Themes in World Lit
Themes in Contemp Lit			

**Math**

Algebra 1	Algebra 2	Intro to Statistics
Accelerated Algebra 1	Honors Algebra 2	IAG 1
Geometry	Trigonometry	IAG 2
Accelerated Geometry	Honors Pre-Calculus	IAG 3
Honors Geometry	Honors AP Calculus	

**Science**

Biology	Honors AP Biology 2	Honors AP Chemistry 2
Accelerated Biology	Physical Earth Science	Honors AP Enviro Science
Bio 2/Genetics	Forensics	Physics 1
Honors Bio 2/ Genetics	Principles of Technology 1	Honors AP Physics 1
Bio 2/ Microbiology	Chemistry	Honors AP Physics 2
Honors Bio 2 Microbiology	Honors Chemistry	

**Social Science**

African American History	American Government	Honors AP American Gov't
American History	Human Geography	Civics
World History	Honors AP American History	World Geography
Honors AP World History	Sociology	Psychology

**World Languages**

All World Language Classes are accepted.

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**NOTES:**