Welcome to the Iowa City Community School District!

We are child-centered and future-focused.

We believe each child is unique and it is our responsibility to provide the best education possible in an environment that is challenging, yet caring and inviting.
When people think about our schools, words like traditional and established come to mind; but also responsive, innovative, creative, and progressive. For over one hundred years, the Iowa City Community School District has been the instructional leader in eastern Iowa, across the state, and throughout the nation.

The District’s comprehensive high schools recognize academic excellence. These high schools consistently rank at the top in Iowa for the number of National Merit Scholars. Our graduates earn ACT and SAT scores that are consistently higher than the national averages and our schools boast graduation rates that remain higher than state and national norms.

Numerous opportunities are provided for our ninth through twelfth grade students to achieve success. Our high schools offer comprehensive instructional programs that meet the diverse educational needs of young adults. Course offerings prepare students for the future, whether they pursue vocational training, attend a technical college or a university, join the military, or move into the world of work. Our students have the opportunity to build their own educational plans through the use of individual learning plans, which help our students and parents select appropriate courses to support the exploration of various career opportunities. Project Lead The Way and numerous Advanced Placement courses give students a tremendous advantage in pursuing their collegiate level education and in-demand career fields. Career academies and concurrent college credit courses are offered through a strong partnership with Kirkwood Community College.

In addition, students have the opportunity to enroll directly in college courses through the Senior Year Plus Act. Students have access to comprehensive career centers that help them explore and determine their path to the future. Access to a full range of technologies, apprenticeships, and community business partnerships keeps our high school programs dynamic learning environments. A wide choice of championship and award-winning athletic and extra-curricular offerings provides our students an arena in which they can build upon the values of teamwork, self-esteem, and perseverance.
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General Information

Registration Guidelines
A FOUR-YEAR PLAN OF STUDY is available for use in the Program of Studies.

As a 1st step, students must give serious consideration to completing the FOUR-YEAR PLAN of STUDY. This will help to ensure that students have a well-planned high school education that will lend itself to post high school plans. This FOUR-YEAR PLAN of STUDY may be updated on a yearly basis as appropriate in consultation with a school counselor.

As a 2nd step, students must carefully read the Program of Studies paying particular attention to graduation requirements, college entrance requirements (2- and 4-year program), course descriptions, and prerequisites.

As a 3rd step, students should work closely with their school counselors to clarify questions and seek advice to complete the FOUR-YEAR PLAN of STUDY. Counselors are also available to assist with questions regarding college entrance requirements and with job shadowing experiences.

Specific Requirements
1. A maximum of 15 credits of a combination of journalism, speech, and communication studies can be applied to fulfill the 60 credits of required English courses.
2. The social studies requirement includes one year of American Studies, one year of World History, two trimesters of government, and one trimester of economics.
3. The physical education requirement requires the student to be registered in PE for one trimester of each year of attendance. Seniors who participate in an athletic sport during the school year may request a waiver from participating in a physical education class. In addition, any student who takes seven classes all three trimesters may request a PE waiver. The requirement may also be waived for those students with a doctor’s medical excuse filed in the Health Office. This waiver must be filed annually.
4. Students must be registered in health for one trimester unless a parent waiver request is approved.

College Entrance Requirements
Students are strongly urged to work closely with their school counselor regarding college entrance requirements and completing their FOUR-YEAR PLAN. A copy of the Iowa’s Regents Universities’ admission recommendations is included as a guideline and should be used early on for general planning purposes. In order to be best prepared for the future, students need to get specific information from a variety of schools and/or post high school programs. Not all courses listed in the Program of Studies meet college and/or NCAA admission requirements.

Academic Eligibility
In order to participate in any high school performance and or be eligible to participate in a sport or competitive activity, a student must have passed all courses the trimester prior to participation and must be enrolled in four subjects (Excluding Driver’s Education). A special education student who is making adequate progress in meeting goals and objectives on the individualized education plan, as assessed by the teacher, will be academically eligible. (Admin. Reg. 503.4c)

Alternative High School
Students at risk of withdrawing from high school or those far behind in credits may be considered for a referral to Elizabeth Tate High School, the district’s alternative high school. The alternative high school’s classes may not be used to accelerate the date of graduation.

Early Graduation
Early graduation is not encouraged because it generally provides only a minimum program; however, there are circumstances under which it is possible. Arrangements for early graduation should be made through the school counseling office during the previous term of the proposed year of graduation. Written application must be made to the student’s counselor, stating reasons for the request. No credit other than from regular high school courses may be used for early graduation.

Recovery Program
If students are behind in credits, they may elect to take courses through the ICCSD summer school or school-year credit recovery program (Edgenuity). The equivalent of 45 course credits* from recovery credit programs may be applied toward an ICCSD diploma. Students must request a written approval form from their counselor prior to enrolling in each course.

*Note: These courses may not be substituted for specific ICCSD High School courses required for graduation without approval from an administrator.

NCAA & NAIA Eligibility
Student-athletes interested in Division I or II collegiate athletics should go online to www.eligibilitycenter.org for a copy of the booklet NCAA Guidance for the College Bound Student Athlete. This booklet lists all academic, athletic and scholarship requirements and regulations student athletes to set up accounts with the NCAA for registration purposes.

Student-athletes interested in playing NAIA sports should go online to www.playNAIA.org for information about NAIA academic and athletic requirements and registration. Students may see their counselor for additional assistance.

FAFSA Information
The FAFSA (Free Application for Federal Student Aid) is a free federally required form for students seeking financial aid for college. This form should be filed after October 1 and prior to June 30th each year (some colleges and states have earlier deadlines). The FAFSA can be filed online at www.fafsa.gov; there is no charge to complete and submit the FAFSA.

Students and families may receive assistance with the FAFSA and Financial Aid process from their counselors.

Fee Waiver Policy
Students whose families meet the income guidelines for free and reduced lunch, the Family Investment Program (FIP), Supple-
General Information

mental Social Security Income (SSI), transportation assistance under open enrollment, or who are in foster care or are legally defined as homeless are eligible to have their student fees waived or partially waived. Forms are available in the Main Office.

Course Load
All students are required to take a minimum of five courses each trimester. Ninth and tenth graders will be assigned to study hall when not in a class. Juniors may have one open period each trimester. Seniors may have up to two open periods each trimester. Students are required to demonstrate a minimum level of proficiency prior to enrolling in advanced level courses. Students should not enroll in more than 2 courses from the same curricular area in any given trimester.

Grade Progression
To ensure students are progressing towards graduation, students who do not complete required courses and accumulate less than a minimum number of credits by the end of the school year will not be promoted to the next grade level. The grade classification follows:

- Freshman: 0-78 credit hours
- Sophomore: 79-155 credit hours
- Junior: 156-232 credit hours
- Seniors: 232-310 credit hours

Criteria for Retaking a Course
A student who passes a course may not repeat that course for credit unless stated in the course description and then only with instructor approval.

Second Grade Options
1. Students may re-enroll in a course in which they received a “C” or lower grade.
2. Student will not earn additional credit for completing the course a second time - no double credit.
3. The second grade earned will appear on transcripts, replacing the previous grade.
4. The student must comply with the behavioral, academic, and attendance expectations of the course.
5. Students cannot request second grade option in an area where they have already completed more advanced level work.

Level Changes
1. All level change requests must be made by the 15th day of each trimester or at the trimester break. All requests made after this time must have administrative approval.
2. The request to change will reflect input from the school counselor, course instructor, and must have parent approval.
3. The student will be moved to a section meeting at the same period as the course dropped unless this section is filled or there is no section at that time. Capacity levels of classes will not be exceeded to grant the request.
4. The student’s grade-in-progress will be transferred to the new class.

Withdrawal from a Course
Students are encouraged to complete the courses they start; however, in the event a student wishes to withdraw from a course, the following guidelines will be used.

Day 1–15: Students may withdraw from a course. No notation will appear on transcript.
Day 16 to three days after Parent/Teacher conferences: Student may withdraw from course with parent permission. The transcript will reflect a “W” (withdrawn).

Guidelines for Schedule Adjustments
Because students are responsible for accepting the course of study for which they register, they must plan very deliberately, always keeping in mind individual interests and post high school plans. Any adjustments following the initial Course Selection Process in January are limited and will be based only on the following reasons:

1. Computer error or imbalance of course sections.
2. Failure in a class that is a pre-requisite.
3. Teacher recommendation and/or request because of inappropriate level placement.
4. Unavailability of a class.
5. Class schedule that fails to meet minimum load requirements.

Requests for reasons other than those listed above are limited to extenuating circumstances and must have parent/guardian approval. Requests that would result in an imbalance in the section numbers of a course will NOT be approved.
A request may be made during the posted adjustment period.

Special Education
Special programs are offered to meet the needs of students with Individual Education Plans and include the full continuum of supports and services. Participation requires referral and staffing procedures. Specific supports and service are determined with input from the parents, student, school counselor, and case manager.
General Information

Gifted Education

The Extended Learning Program (ELP) serves gifted and high ability students. The focus of ELP at the high school level is on guidance and counseling, particularly post-secondary preparation. ELP guidance and counseling is designed to supplement general education counseling for students with academic performance and needs beyond regular counseling and education services. Eligibility is determined through the evaluation of multiple criteria including objective and subjective data. The program involves a series of targeted, deliberate and proactive services within the School Counseling Office that will be conducted during the school day by an Extended Learning Program counselor.

Senior Year Plus Program

The Senior Year Plus Program gives motivated, eligible high school students the opportunity to get a “jump start” on college by earning college credit* before attending on a full-time basis. Options include concurrent courses on site and at the Kirkwood Regional Center, PSEO courses at the University of Iowa, Project Lead The Way® (PLTW) and AP courses. The grade earned in each completed course becomes part of the student’s cumulative GPA at Kirkwood. Students will receive high school credit, but the grade will not be a part of the student’s high school GPA.

Post-Secondary Enrollment Options (PSEO)

ICCSD High School students have the opportunity to take approved courses at the University of Iowa under the state’s Post-Secondary Enrollment Options Act. Tuition will be paid by the district. Students should contact the school counseling office regarding the state guidelines and specific requirements.

Through this program the district is able to provide a wider variety of options including advanced courses in mathematics, science, social studies, humanities, and vocational technical education. Students who successfully complete college courses may earn both high school and college credit.

Kirkwood Regional Center

The Kirkwood Regional Center at the University of Iowa (Oakdale campus) offers juniors and seniors from all Johnson County school districts the chance to earn both college and high school credit in career academies in a state-of-the-art new facility. Student may choose from 20 different academies that provide a head start to post-secondary education or lead directly to a post-high school career. In addition to academies, KRC also proves companies’ courses such as the STEM Innovator course that partners students with business mentors and teachers in a project-based, non-traditional curriculum to develop real products and community services.

The grade earned in each course becomes part of the student’s cumulative GPA at Kirkwood. Students receive high school credit, and the grade is included on the high school transcript and does impact the student’s ICCSD cumulative GPA. Transportation to and from the regional center from each high school is available. For more information about the Kirkwood Regional Center at the University of Iowa, please go to: http://www.kirkwood.edu/johnsonregional or speak with your school counselor.

Project Lead the Way® (PLTW)

PLTW Pathway to Engineering (PTE) program is a sequence of courses which follows a proven hands-on, real-world problem-solving approach to learning. Students learn and apply the design process, acquire strong teamwork and communication proficiency, and develop organizational, critical-thinking, and problem-solving skills. They explore aerodynamics, astronautics, and space life sciences. Students apply biological and engineering concepts related to biomechanics. They design, test, and actually construct circuits and devices such as smart phones and tablets.

All PLTW classes are dual enrollment except Aerospace Engineering. Students who enroll in PLTW courses will receive high school credit and college credit from Kirkwood. In addition, students who pass the final college credit exam may be eligible to receive four-year college credit at selected four-year colleges, for a small transcript fee. More information about PLTW college credit can be found at PLTW.org.

Advanced Placement (AP)

Advanced Placement provides an academically challenging curriculum that allows students to take college level courses while still in high school. For each AP course, an AP Exam is administered in May at participating schools worldwide. High school students may choose to take the AP exams in specific subjects such as English, world language, chemistry, history, calculus, psychology, biology, economics, computer science, environmental sciences, and fine arts. Except for AP Studio Art, which is a portfolio assessment and AP Capstone Seminar, which includes student portfolio assessments starting with trimester 2, each AP exam contains a free response section (either essay or problem solving) and a section of multiple-choice questions. The modern language exams also have a speaking component, and the AP Music Theory Exam includes a sight-singing task.

Colleges and universities use the AP results to determine college preparedness, student motivation, and placement. Students have the opportunity to earn credit or advanced standing at many of the nation’s colleges and universities. A fee is required to take the AP exam. This fee may be waived for students who meet criteria for the free or reduced lunch program. Please refer to the College Board website at www.college-board.com/student/testing/ap/about.html and your school counselor for further information.

Workplace Learning Connection

The Workplace Learning Connection in collaboration with Kirkwood Community College and the Iowa City Community School District partners with local employers to offer a unique opportunity for work-based learning. Students may select career specific internship or practicum experiences. Upon completion of the on-site hours, career skill development hours, and additional requirements, students MAY receive elective high school credit: 5 credits for a 45-hour Internship I and 10 credits for a 90-hour Internship II/Practicum I. This will be noted on the transcript with a Pass or No Pass and will not be included in the GPA. Sessions are available for the summer, fall, and spring. Additional information is available at http://www.workplace-learning.org. Students should consult with their counselor to coordinate this experience.
Graduation Requirements

Most ICCSD students graduate with more than 310 credits. This usually amounts to one elective course per trimester in 9th and 10th grades and two to three elective courses per trimester, in 11th and 12th grades. Students earn five credits per course per trimester for most courses. Students must have attended ICCSD for their final trimester of academic work in order to receive a diploma from ICCSD.

COLLEGE BOUND RECOMMENDATIONS
365 CREDITS

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<tr>
<td>Electives</td>
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ICCSSD DIPLOMA REQUIREMENTS
310 CREDITS

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<td>Electives</td>
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SPECIFIC REQUIREMENTS

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All students must earn a minimum of 310 credit hours to graduate from ICCSD.
Minimum course load per trimester requirement is 5 courses.
### FOUR YEAR PLAN WORKSHEET

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*PE is required one trimester per school year and will be scheduled where it fits best. Students should not register for more than one PE course unless it is necessary to make-up a previously failed PE class.

**Health is a one trimester course that can be taken at any time during the student’s enrollment

***Government I, Government II, and Economics may be taken during the junior or senior years.

****Personal Finance may be taken during the junior or senior years.
ICCSD Mathematics Paths in Grades 7-12

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Electives:
- AP Statistics
- AP Computer Science
- Computer Science Principles
- Art of Multi-Problem Solving
- Topics in Math
- Pre-Calculus

ICCSD Science Pathways Grades 7-12

Accelerated Pathway

7th Grade
- Science Issues and Applications 1

8th Grade
- Science Issues and Applications 2
- Earth and Space Science

9th Grade
- Biology

10th Grade
- Physical Science

11th Grade
- Physics
- AP Chemistry

12th Grade
- AP Chemistry
- AP Environmental Science
- AP Biology
- AP Physics

* Honors Chemistry is a prerequisite for AP Chemistry
** Chemistry or Physical Science is a prerequisite for AP Environmental Science and AP Biology
*** Pre-Cal is a prerequisite for AP Physics
**Art Forms***

An opportunity to experiment and explore the visual arts through a variety of materials with an emphasis on studio production in both 2-D and 3-D forms. This foundation course is recommended for all students.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

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**Expressive Drawing**

An opportunity to focus on the personal interpretation and expressive qualities that contribute to the impact of images. Students will express themselves using cartooning, collage, and alternative surfaces.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

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**Metalworking and Jewelry**

(West High and Liberty High only)

An introduction to basic metalsmithing and jewelry making techniques. Students will use silver soldering and cold joining techniques to create jewelry and small functional and sculptural projects. The “lost wax” casting process will be used to create rings, pendants, and other three-dimensional pieces.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

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**Glass (City High only)**

Students will learn the basic techniques of stained glass, mosaic work and glass fusing. Students must be responsible enough to work with complicated tools and equipment. Creativity, artisanship, responsibility, and good production ethics will be the basis for evaluation in this class.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

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**Stained Glass**

(West & Liberty High only)

An introduction to stained glass cutting and construction techniques. Emphasis will be placed on generating expressive designs and producing well-crafted stained-glass projects. Supplies may be purchased from the art department.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

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**Sculpture**

Students will use a variety of materials and techniques, including plaster, papier-mâché, clay, found objects, cardboard, and wire.

**GRADE LEVEL:** 9-12

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**Digital Photography**

Learn the techniques and art of photography. From shutter speed and apertures to understanding and applying the principles of design, this class will give students the tools to make great photographs. Students will learn the process of fine art, photography, photojournalism and how to take photos in a studio setting. Photoshop basics will be introduced for editing, as well as more creative options.

**GRADE LEVEL:** 9-12
Advanced Photography (City High only)
Students will build on skills learned in Digital Photography by creating and manipulating digital images. It is recommended that students have access to their own digital cameras but can also use the school’s equipment. This course will have an added emphasis on lighting and creating a portfolio of digital images and prints. Independent growth and personal responsibility will be emphasized. Students buy their own photo paper.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Digital Photography and permission of instructor
LENGTH: 1 Trimester

Video Production 1
An introductory course on the operation of a video camera, and the editing of digital video. Instruction is focused on specific techniques to be used for desired effects of communication such as shot variety, use of angles, voice-overs, sound production, and storyline development.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Graphic Design
Students will use the computer and other technologies as an art tool to generate visual images. This course will give students an expanded view of the use of technology in the visual arts and how it can be used in the business world as well as the fine art world.
GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Advanced Graphic Design (City & West High only)
Students will use the computer and other available technologies to generate an electronic portfolio. Students will examine current industry examples to learn how to inform their work in the electronic format. Students will learn web design, animation and about the impact of electronic information and design in the 21st century.
GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: Graphic Design
LENGTH: 1 Trimester

Printmaking (City High only)
This course introduces students to fundamental methods of creating multiples of an image. Examples include screen printing on fabric, linoleum and woodblock relief, solar printing (cyanotype), intaglio/etching techniques, and monotype processes will be explored. Includes digital and analog processes
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Drawing OR Graphic Design (recommended)
LENGTH: One Trimester

Video Production 2 (West High only)
An opportunity to apply technical knowledge from Video Production 1 in the conception, writing, shooting, and editing of longer projects in a workshop-style class.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Video Production 1
LENGTH: 1 Trimester

AP Art and Design
This is a year-long college level course where students will choose to work on a portfolio in one of the following areas: Drawing, 2-D Design, or 3-D Design. The Portfolios share a basic three-section structure, which requires the student to show a fundamental competence and range of understanding in visual art concepts and methods. Open-ended assignments will introduce a variety of concepts, approaches, and media to help students complete the breadth portion of the portfolio. Students will be encouraged to experiment with techniques and ideas to bring his/her voice to a range of design problems. Students will work more independently to develop a body of work for the concentration section of their AP portfolio. Students may complete the final two trimesters of this course independently.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Business Education
Entrepreneurship
Is it a dream of yours to open your own business someday? Spark your entrepreneurial spirit by learning all the different aspects included and skills required to become a small business owner. Hands on activities including units on self-exploration, market analysis, finance management and social/ ethical responsibilities are covered. Each student will create a business plan for a potential business they might start. Entrepreneurs from the corridor area serve as weekly speakers to enhance the curriculum. Three hours of University of Iowa Credit may be obtained through this course.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Futures: Planning for Success
What does the future entail for me? This class helps you begin thinking about the different ways you can answer this question. Students identify their own skills, aptitudes, likes and dislikes to help them explore different career options. In addition, an in-depth study of different careers and the strategies needed to reach your goals are taught. Creation of a professional resume and interviewing skills also provide students with valuable job getting skills. Students will participate in a one-day job shadow experience sometime during the trimester.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Computer Technology
In this course, students enhance their computer skills using Microsoft Office Software (Word, Excel, Access, PowerPoint, and Publisher). Google Docs, Photo Story and Prezi are also business applications explored.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester
Advanced Computer Technology
Students take what they have learned in Computer Technology and move beyond it with advanced applications in Microsoft Office. There will be comprehensive use of Flash (animation software) and web page design.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Computer Technology
LENGTH: 1 Trimester

Marketing and Sales
Sell yourself and your business ideas in this global society by enrolling in this elective. Sales and marketing concepts are important to everyone. The skills you learn are used to understand and promote individual and business ideas internationally. The class focuses on the psychology of consumer decision making, and deciphers each area of the marketing mix: place, product, price, and promotion
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Personal Finance
This course focuses on our society and the role that finance plays in it. Budgeting, banking, insurance, and the many aspects of investing are covered in depth. This class will give you the foundation to make sound financial decisions.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Personal Finance (Kirkwood CC Credit Course)
Personal Finance is the process of planning spending, financing, and investing while implementing specific strategies and actions to optimize your financial circumstance and independence. This course is designed to explore the concepts of budgeting, tax planning, retirement planning, estate planning, insurance, financing, and investing while examining specific strategies and action steps related to each.
GRADE LEVEL: 11-12
CATEGORY: Meets the Personal Finance Requirement
PREREQUISITE: None
LENGTH: 1 Trimester

Introduction to Business
This course introduces the business world and an understanding of our economic environment. Units of study include business ethics, marketing, entrepreneurship, and the globalization of business. Students will also receive a comprehensive look at how different business structures operate within our economy.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Introduction to Business (Kirkwood CC Credit Course)
Focuses on American and global business and introduces the student to each primary facet of operating a business. This course will help the student understand economic, social, and political influences that affect business success.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Semester

Accounting
This course provides students with an opportunity to learn the fundamentals of double entry bookkeeping and serves as a background for those who wish to pursue a business career in college. Accounting elements, analyzing the effects of business transactions, journalizing, using special journals, posting, creating financial statements, understanding banking, creating payroll, and making financial decisions for a business are topics included.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

Advanced Accounting
Students expand their knowledge of accounting principles, concepts, and terminology through the incorporation of partnerships, accounting for a corporation, departmentalized accounting, and automated accounting. Practice sets will be utilized as well as an automated accounting system, Peachtree. Students will also be required to complete a job shadow with a professional in a chosen field of accounting.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: Accounting
LENGTH: 1 Year

Professional Pathways (West High only)
This course is designed to develop leadership skills in a dynamic environment. Skills needed to be successful in life and set you apart from the competition are learned through hands-on real-life experiences. A powerful curriculum allows seniors an opportunity to explore career opportunities, develop soft skills that companies demand, learn problem-solving, teamwork, communication, and human relations skills.
*Permission of instructor is required to enroll. Being an active member of Business Professionals of America (B.P.A.), a national student business organization is required when enrolled in Professional Pathways.
GRADE LEVEL: 12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

Web Design (West High only)
Students will be taught hypertext markup language principles used in creating well-designed web pages. Students will also use JavaScript on an introductory level.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

Keyboarding (City High only)
This is a beginning course for students who have NO previous typing experience or keyboarding instruction. Students learn the fundamentals of the alphabet and numeric keyboard. Much of the time will be spent drilling for speed and accuracy and developing proper technique. Students who have completed keyboarding in junior high should enroll in Computer Technology and will not be allowed to enroll in Keyboarding without permission of the instructor.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Textiles and Design
Students of any level can take this sewing course. In this course students will learn foundational sewing techniques and read and use patterns that will be used on various
projects of choice determined by the instructor. Careers in fashion, textiles, and design will be explored. Examples of projects include personal quilt, clothing, pillowcases, and zipper bags. Students will leave with a knowledge of how to insert a zipper, read a pattern, sew a straight and zigzag stitch and create projects to bring home.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### Culinary Arts 1

This introductory course focuses on basic food preparation. Nutrition and eating habits, as well as units on using a recipe, quick and yeast breads, cookies, fruits, vegetables, and salads are also explored. Nutrition and the food pyramid, as well as units on the recipe, quick bread, yeast bread, cookies, fruit, vegetables, and salads are also explored. This is an excellent course for all students, recognizing everyone will be responsible for purchasing and preparing their own food soon.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### Culinary Arts 2

Units in pies, pastry, beef, pork, cheese, milk, grains, pasta, legumes, eggs, and soup will be explored. Students will study, prepare, sample, and evaluate foods from the various units, as well as learn more about the purchase and use of small equipment. Students will also be responsible for demonstrating the preparation of a chosen food item.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** Culinary Arts 1  
**Length:** 1 Trimester

### Culinary Arts 3

Students use basic skills acquired in Foods 1 and Foods 2 to plan, prepare, serve, and evaluate complete meals. Topics include healthy eating behaviors, foreign foods, grocery shopping, cake decorating, kitchen design, appliances, and meal planning.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** Culinary Arts 2  
**Length:** 1 Trimester

### Child Development 1*

This course will explore parenting styles and techniques, child abuse, foster care and adoption, family planning, human reproduction, pregnancy, and birth. Community speakers as well as a textbook will be used in this class. The focus will be on parenting and what it means to be an effective parent. Any student planning on becoming a parent in the future would benefit from this class.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### Child Development 2

Students will explore human growth and development from infancy to 10 years old. Mental, physical, social, and emotional development of each age group will be covered. Various community speakers will be used to support the textbook. Health, safety, childcare, and positive parenting will be covered. Students who are interested in learning more about children would benefit from attending this class.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### On Your Own*

Students planning to move into college dorms or live independently in apartments can better prepare themselves for the future by learning about housing, budgeting, laundry, leases, credit, shopping, cooking, mending, sexuality, and personal responsibilities. This course is designed for students who want a chance to practice basic living skills before entering college or the workforce.

**Grade Level:** 11-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### Housing and Interior Design

Students will study the fundamentals of housing and explore a variety of careers in the housing field. They will create projects centered on bedroom remodeling, color, apartment design, and periods and a variety of housing styles from throughout history.

**Grade Level:** 9-12  
**Category:** Elective  
**Prerequisite:** None  
**Length:** 1 Trimester

### Health*

This course will provide students with the knowledge and skills to make the critical health choices throughout their lives and enable them to establish lifelong healthy behaviors. Students will comprehend concepts related to health promotion and disease prevention; analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors; demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risk; demonstrate the ability to use decision-making and goal-setting skills to enhance health; demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks and demonstrate the ability to advocate for personal, family and community health. Units of instruction include Mental, Social and Emotional health; Violence Prevention; Tobacco, Alcohol and Illegal Drugs including the misuse of Drugs; Personal Health and Wellness; Safety and Injury Prevention; Human Growth and Reproduction including Sexual Health.

**Grade Level:** 9-12  
**Category:** Fulfills Health Requirement  
**Prerequisite:** None  
**Length:** 1 Trimester

### Personal Wellness and Fitness

This course provides students with information about healthy lifestyles and helps them assess areas that may need to change to promote optimal health, wellness, and fitness. Students will design and implement a personal wellness and fitness plan that incorporates multiple health concepts including nutrition, stress management, safety, relationships, and physical fitness. Some class periods will take place in the gym to incorporate activity into an overall healthy lifestyle.

**Grade Level:** 9-12  
**Category:** Fulfills Health Requirement  
**Prerequisite:** None  
**Length:** 1 Trimester

### Current and Critical Health Issues

This course provides students with decision-making skills and experiences related to current and critical health issues. Students will have the opportunity to self-select a
contemporary health issue to be investigated, researched, and explored. Topics may include and are not limited to stress management; mental wellness; positive body image; substance abuse prevention; disease prevention; and environmental health issues.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Industrial Technology**  

**Fundamental of CAD**  
Students will learn to use the principles and elements of design to create product solutions for the client. 3D Modeling Programs will be used to model and communicate design solutions through renderings and presentations. This course is good preparation for Introduction to Engineering Design.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Fundamentals of Electricity I**  
(West High only)  
This course is designed to help students understand the basic principles behind the forces of electricity and how we can control it to do useful work. DC electronics will be heavily reinforced with hands-on laboratory experiments. Circuit design, reading of schematics, circuit construction, testing/analyzing circuits and troubleshooting faults are all part of the electronics technician’s skill set. Safety around electricity and its hazards are studied in depth and strongly emphasized. The relationship of electricity and magnetism will be studied and explored as the students construct an electric motor. Various sources of energy, renewable and nonrenewable, will be investigated through research and experimentation.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Fundamentals of Electricity II**  
(West High only)  
This course builds on material from Fundamentals of Electricity. Digital electronics, robotics and residential electrical systems are the areas of concentration with hands-on project-based activities used to support the concepts. Students will learn how to handle materials and use the tools of the industry while practicing safety concepts.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Fundamental of Electricity  
**LENGTH:** 1 Trimester

**Introduction to ACE**  
(City & Liberty High only)  
ACE stands for Architecture, Construction, and Engineering. This course is designed to help students learn and explore different construction industry careers. ACE provides a hands-on view of courses and careers pathways that vary from Architecture, Interior Design, Mechanical Engineering, Construction and Construction Management, Materials Processing, PLTW, as well as Industrial Technology opportunities. Students will have the chance to work on projects from the design phase to actual construction. Field trips and guest speakers will enhance the learning experience and provide real life experiences for students to let them explore countless career opportunities.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Residential Construction**  
This course will be an introductory course in residential building construction. The various phases of home construction will be studied such as Project Planning, Site Preparation, Framing, Enclosing, and Roofing; these phases will be reinforced with hands-on activities. Safety on the job site and with power tools will be taught. Study and handling of various material types used in construction projects will be promoted to help make the best consumer choice regarding budgets and the environmental concerns. Print reading and applications of math skills will be practiced where necessary in planning and estimating use of materials.

**GRADE LEVEL:** 10-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Construction Tech, Intro to ACE  
**LENGTH:** 1 Trimester

**Construction Materials Processing II**  
(Advanced Woodworking)  
This course continues to expand upon the skills and techniques acquired in Construction Materials Processing I to include real-world employability skills. Construction skills that will be acquired will include machine skills and equipment usage, hand and power tool capabilities, time management, interpreting plans, specs, and working drawings, problem-solving, conflict resolution, and material usage (that leads into and includes an individual building or team project).

**GRADE LEVEL:** 10-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Construction Materials Processing  
**LENGTH:** 1 Trimester

**Construction Technology**  
(Kirkwood CC Credit Course)  
(City & Liberty High only)  
This course is designed to give students an introduction to construction systems. Students will participate in individual and/or group project(s) built throughout the semester. The project(s) will be determined by the needs of the class, community, and school district. Included is a wide range of topics that cover job-site safety, concrete construction, rough framing construction, roofing construction, interior construction, electrical, fine finish carpentry, and other topics within the construction cluster.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Architectural Plans and Specifications**  
(Kirkwood CC Credit Course)  
(City & Liberty High only)  
Introduces the skills and methods for understanding and interpreting construction drawings and technical specifications for
residential and commercial buildings. Utilizing existing construction documents, students will learn to communicate through cloud-based collaboration technologies. Activities related to 2D and 3D measurement, scaling and markups will be performed.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Construction Lab
(Student Built)
Provides on-site construction experience that emphasizes teamwork, communication, productivity, and the soft skills required for success in the construction industry. Students are introduced to hand and power tools commonly used in construction, along with basic residential and commercial construction systems and construction safety. Construction systems may include foundation systems, floor systems, wall systems, roof systems, exterior finishes, and interior finishes.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: Introduction to ACE, Residential Construction, or Construction Technology
LENGTH: 3 Periods

Language Arts

English 9*
English 9 introduces students to high school level study of the language arts—reading, writing, listening, speaking, and media literacy. Common units of study include short stories, novels, media, research, poetry, and epic/drama (Romeo and Juliet; Homer’s Odyssey). Students compose in expository, narrative, persuasive, and analytical modes. Revision and editing skills are stressed. Students deliver speeches in a supportive setting.
GRADE LEVEL: 9
CATEGORY: Fulfills English 9 requirement
PREREQUISITE: None
LENGTH: 1 Year

English 9 Honors
English 9H is an option for honors credit for those students enrolled in English 9. This course addresses all the major curriculum of the regular English 9 course. At the honors level, the students are expected to meet higher performance standards. For each major unit, students will choose from a list of honors activities and complete a task that complements their coursework. Students will reflect upon their honors work each trimester with a culminating portfolio.
GRADE LEVEL: 9
CATEGORY: Fulfills English 9 requirement
PREREQUISITE: None
LENGTH: 1 Year

English 10*
English 10 continues the study of the language arts—reading, writing, listening, speaking, and media literacy. Common units of study include short narratives, novels (e.g., Of Mice and Men, science fiction, etc.), memoir, research, poetry, and epic/drama (a Shakespearean play). Students compose 2-3 multi-draft papers in expository, narrative, persuasive, and/or analytical modes. Some tasks are delivered as speeches. Students work to review and master literary terms, structures, and patterns.
GRADE LEVEL: 10
CATEGORY: Fulfills English 10 requirement
PREREQUISITE: English 9
LENGTH: 1 Year

English 10 Honors
English 10 Honors is an accelerated language arts course intended for students who already have a firm grasp on fundamental reading, writing, speaking, listening, and media literacy skills. Like English 10, common units of study include short narratives, Of Mice and Men, science fiction, memoir, research, poetry and epic/drama (a Shakespearean play). Students in English 10 Honors read a larger variety of works at a faster pace and frequently participate in higher-level, whole-class discussion, and write more in a variety of modes. Some tasks are delivered as speeches. Additional emphasis is placed on yearlong synthesis.
GRADE LEVEL: 11-12
CATEGORY: Fulfills English 11 or English 12 requirement
PREREQUISITE: English 9 and 10
LENGTH: 1 Year

United States Literature Honors
U.S. Literature Honors is an accelerated language arts course that explores American literature and culture from the seventeenth century to the present. Like U.S. Literature, common units of study include American novels (e.g., The Great Gatsby), modern drama, and poetry. Students in U.S. Literature Honors read a larger variety of works at a faster pace, frequently participate in higher-level, whole-class discussion, and write more in a variety of modes. Some tasks are delivered as speeches. Additional emphasis is placed on yearlong synthesis.
GRADE LEVEL: 11-12
CATEGORY: Fulfills English 11 or English 12 requirement
PREREQUISITE: English 9 and 10
LENGTH: 1 Year

U.S. Humanities* (Tate, West & Liberty High only)
The study of post-World War II American culture designed for highly motivated students who want to learn methods of understanding how the culture of America has evolved and been influenced through literature, film, television, drama, music, the fine arts, and other aspects of popular culture. Students will make an in-depth analysis of the early decades (the 1950s and 1960s) as a means of developing a foundation and more lucid understanding of how they have affected “the big picture.” Students will examine the following general topics and their impact: American values, politics, youth culture, race, gender, and significant movements. Learning methods will include reading whole or parts of relevant literature, speaking and listening during class discussions; active viewing of visual media; and writing analysis papers over course material.
GRADE LEVEL: 11-12
CATEGORY: Fulfills English 11 or English 12 requirement
PREREQUISITE: None
LENGTH: 1 Year
African American Literature
This course explores the history and culture of Africa and the African American experience in an interdisciplinary format with a central focus on the emergence of black postmodernism. The course will read, dissect, and engage in discourse surrounding African American writers inspired and involved in politics, the evolution of the Black Aesthetic Movements, Black feminist and womanist literature, the emergence of the alleged Third Renaissance (1990’s and 2000’s), and the artistic contributions of African Americans to American culture. The course will concentrate primarily on strengthening student discourse, critical thinking, and writing skills.
GRADE LEVEL: 11-12
CATEGORY: Fulfills English 11 or English 12 requirement
PREREQUISITE: English 9 and English 10
LENGTH: 1 Year

World Literature*
World Literature studies the literature, culture, and history of many of the world’s great civilizations. Students will examine the context in which the literature was produced to help enrich their understanding of cultures and how they are interconnected with other cultures through literature, theater, film, music, and the arts. Students compose in expository, narrative, persuasive, and analytical modes. Some tasks are delivered as speeches. Additional emphasis is placed on close reading and group discussion.
GRADE LEVEL: 11-12
CATEGORY: Fulfills English 11 or English 12 requirement
PREREQUISITE: English 9 and 10
LENGTH: 1 Year

AP English Literature and Composition
AP English Lit is an accelerated language arts course that emphasizes critically reading and discussing college-level literature, as well as writing literary analyses. Common units of study include novels, Shakespearean drama, Greek tragedy, mythology, short stories, poetry, essays, and philosophy. Students may take the AP examination in May. Many colleges and universities grant credit if the student’s examination score demonstrates a sufficient level of mastery.
GRADE LEVEL: 11 & 12
CATEGORY: Fulfills English 12 requirement
PREREQUISITE: English 9, 10 and a literature course.
LENGTH: 1 Year

AP English Language and Composition
This course enables students to analyze and evaluate complex non-fiction texts and arguments and to write their own effective arguments. Curriculum surveys conducted by the AP English Language and Composition Development Committee show that it is equivalent to a two-semester introductory college course in rhetoric and composition. Some universities and colleges grant credit if a student’s examination illustrates a sufficient level of mastery.
GRADE LEVEL: 12
CATEGORY: Fulfills English 12 requirement
PREREQUISITE: English 9 and 10 and a literature course
LENGTH: 1 Year

Composition I
(Kirkwood CC Credit Course)
Composition I develop expository writing with emphasis on organization, supporting details, style, vocabulary and library research skills.
GRADE LEVEL: 12
CATEGORY: Fulfills English 12 for 1.5 Trimesters
PREREQUISITE: English 10
LENGTH: 1 Semester

Composition II
(Kirkwood CC Credit Course)
Composition II teaches precise and responsible use of research tools. Requires critical analysis of reading materials, audience and self when communicating content material. Develops ability to use effective and ethical arguments.
GRADE LEVEL: 12
CATEGORY: Fulfills English 12 for 1.5 Trimesters
PREREQUISITE: Composition I
LENGTH: 1 Semester

Reading Strategies*
Reading Strategies focuses on raising students’ reading levels by addressing fluency, vocabulary, comprehension, and stamina. Strategies taught will be applicable to all content areas. Students may elect to take the class or may be placed in the class based on assessment data and teacher recommendations. This course does not meet Language Arts graduation requirements or NCAA requirements and may not meet entrance requirements for some colleges and universities.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Enrollment based on Iowa Assessment scores and teacher recommendations.
LENGTH: 1 Year

Foundations of Journalism
Foundations of Journalism focuses on writing articles for both print and online publication, designing magazine pages, taking photographs, editing, and viewing current events and understanding the basics of media law. Throughout the year, students become critical readers and viewers of modern media, reading, and discussing the news each day. Students also could contribute articles, artwork, photographs, and designs for publication in the school newspaper or website.
GRADE LEVEL: 9-12
CATEGORY: Fulfills English 12 requirement
PREREQUISITE: None
LENGTH: 1 Year

News Lab
News Lab is devoted to producing the school newspaper and website. The purpose of this class is to promote professional journalism, enhance students’ journalistic skills and encourage the production of a student-run publication. News Lab focuses on writing articles, conducting interviews, designing newspaper pages, taking photographs, designing advertisements, reading, and viewing current events, and understanding media law. Most production work is done outside regular school hours. Editors must register for the year. This class may not meet the English admissions requirements for all colleges. Students should check with the colleges to which they are applying.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Foundations of Journalism and instructor approval
LENGTH: 1 Trimester

Yearbook Lab
Yearbook Lab is devoted to capturing the history of the school year for presentation in the yearbook. Editors and staff members develop story ideas, conduct interviews, design pages, take photographs, and design advertisements. Editors and staff members use problem-solving techniques to decide how to cover events and people, and when
to substitute coverage as a result of last-minute changes. All staff members are required to sell advertising to help support the yearbook. In the process, they learn to interact professionally with local businesses. Most production work is done outside regular school hours. Editors must register for the year. This class may not meet the English admissions requirements for all colleges. Students should check with the colleges to which they are applying.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Foundations of Journalism and instructor approval  
**LENGTH:** 1 Trimester

### Broadcast Lab

Broadcast Lab is devoted to producing video journalism. The purpose of this class is to promote professional journalism, enhance students’ journalistic skills and encourage the production of a student-run broadcast. Broadcast Lab focuses on writing copy, conducting interviews, recording, and editing videos, reading, and viewing current events, and understanding media law. This class may not meet the English admissions requirements for all colleges. Students should check with the colleges to which they are applying.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Foundations of Journalism and instructor approval  
**LENGTH:** 1-3 trimesters

### Bible as Literature

Bible as Literature explores the Hebrew and Protestant Bibles from a literary and historical (non-religious) perspective. Through this course, students will: 1) recognize the Bible as a great literary work, 2) realize the Bible’s importance to the cultural history of Western society, 3) become familiar with the most influential stories, characters, symbols of the Judeo-Christian tradition, and 4) be able to recognize Biblical allusions in art, literature, music, and politics. The course is a combination of lecture, discussion, test taking, reading, and writing.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester of Literature  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

### Contemporary Literature*

Contemporary Literature is a reading course in which students explore a variety of topics and interests within specified categories of books. Students self-select books and read them in class as well as outside of class. Grades are based on the number of books read, the thoroughness of written responses, and the quality of oral conferences held with the instructor.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester of Literature  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

### Short Story*

*(Tate, West & Liberty High only)*

Students analyze short stories for literary terms and techniques, including plot, setting, mood, characterization, point of view, and theme. Students read and listen to multiple short stories, view different presentations of stories, interpret, and analyze stories in large and/or small group discussions, complete study guides, and write paragraphs and themes.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester of Literature  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

### Creative Writing*

Creative Writing is an intense writing course that explores several creative genres, including but not limited to short stories, poetry, and memoir. Some students may also choose to explore a choice genre (one-act play, rap, spoken word, etc.). Drafts are critiqued in a workshop setting. Revision of drafts is mandatory for success in this class. The course emphasizes tools for creative writing and literary elements (dialogue, imagery, poetic devices, and structural tools) rather than specific topics. Students will put together a final portfolio or will submit their pieces for possible publication.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester of Writing  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

### Essay Writing*

Essay Writing stresses the development of writing skills. Students practice the writing process and workshopping techniques. Basic units include personal, descriptive, persuasive, and professional writing, as well as syntax and diction. Students compose and revise their own writing based on what they have discussed, observed, and considered in class. Assignments stress author, audience, purpose, and specific writing standards (focus, support and elaboration, organization, and conventions). Students are expected to respond to others’ writing in addition to sharing some of their own writing in class.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester of Writing  
**PREREQUISITE:** English 9 and 10  
**LENGTH:** 1 Trimester

### English Grammar and Usage*

*(West & Liberty High only)*

Exposes students to grammatical terminology necessary for analyzing and discussing language and writing. Areas of study include parts of speech; sentence patterns; fragments and run-ons; phrases and clauses; parallel construction; consistent use of tense, person, verbs, and pronouns; punctuation; and spelling. Students are expected to participate in class activities, take accurate lecture notes, complete assignments, demonstrate knowledge and skills in quizzes, improve ability to proofread their writing, and increase awareness of their oral and written usage problems.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

### Public Speaking*

Public Speaking is designed for students who do not like to get up in front of groups of people, as well as for confident speakers. Students receive training and practice in the preparation and delivery of public speeches and interpretive presentations. Students read, view, examine, and discuss examples of famous public speeches. They also write and deliver their own public speeches, reflecting many of the various purposes of public speaking. Additionally, emphasis will be placed on developing good speaking techniques, stage fright anxiety, research skills, organization, listening, observing, and evaluating peer work.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester
**Media Literacy and Communications***

This course is designed to help students improve listening and oral communication skills through participation in various group activities such as panel discussions, oral interpretation, or media presentations. The aim is to improve speech skills through group support and interaction. This course is recommended for all students regardless of post high school plans. This course is accepted by colleges and universities. However, the NCAA Eligibility Center does not accept this class regarding meeting NCAA eligibility criteria.

**GRADE LEVEL:** 11-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Acting** *(City & Liberty High only)*

This trimester elective is open to any student. Acting will improve students’ oral communication skills while enhancing their understanding and appreciation of theater. Students will read, analyze, and perform various types of literature. Various group and partner performances are required as well as individual performances. The primary goal of this course is to help students become more comfortable with presentation and themselves through improvisation, pantomime, warm-ups, and other acting exercises. Note: This elective does not meet NCAA requirements and may not meet entrance requirements for some colleges and universities. Some colleges will accept this course as a Language Arts course however some may not. Students may need to select an additional Language Arts elective to meet college Language Arts admission requirements.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Fulfills English 12 requirement for 1 trimester  
**PREREQUISITE:** None  
**LENGTH:** 1 Trimester

**Movement and Acting** *(West High only)*

A continuation in developing the acting skills and techniques taught in Intro to Theatre. Projects include improvisation work, duet scenes, modern monologues, Shakespearian monologues, play analysis, acting analysis, audition technique, and some World Theatre study.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Introduction to Theatre  
**LENGTH:** 1 Trimester

**Technical Theatre** *(West & Liberty High only)*

Technical Theatre will touch on the “backstage” areas of theatre, including lighting, set design & construction, scene painting, props, costume & makeup. Students will work on individual and group projects, including (but not limited to) our school’s main stage productions. This course will be offered every-other year.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Elective  
**PREREQUISITE:** Introduction to Theatre  
**LENGTH:** 1 Trimester

**Mathematics**

Students who demonstrate high aptitude and motivation in Algebra I and want to move to the advanced course sequence may enroll in Geometry Honors and Algebra II Honors in the same year. This change requires teacher recommendation and a highly motivated student. These students then continue with Pre-Calculus Honors and Calculus.

**Algebra 1***

Algebra 1 is the foundation for further study of mathematics. It is the first of three math courses that are required for admission to most four-year colleges (the other two being Geometry and Algebra 2). Students learn to reason symbolically and graphically. Writing, graphing, and solving linear and quadratic equations are key topics. This course emphasizes reading and problem solving for unknown quantities using visual as well as symbolic representations. This course will prepare students for the study of Geometry and Algebra 2.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Fulfills 1 year of Math requirement  
**PREREQUISITE:** Pre-Algebra 8 or Introduction to Algebra  
**LENGTH:** 1 Year

**Geometry***

Geometry is the study of properties of figures in space. It includes right triangle trigonometry and the study of transformations. Inductive and deductive thinking skills are used in problem solving situations, including applications to the real world. Proof writing is included, as students prove properties of geometric figures, including polygons and circles. This course will prepare students for the study of Algebra 2.

**GRADE LEVEL:** 9-12  
**CATEGORY:** Fulfills 1 year of Math requirement  
**PREREQUISITE:** Algebra 1 or Algebra 1A and Algebra 1B  
**LENGTH:** 1 Year

**Geometry Honors**

Geometry Honors is a course designed for students in the accelerated mathematics program. Topics are studied with great rigor and at a rapid pace. Formal and rigorous proof writing will be developed with an emphasis on deductive reasoning. Concepts involving logic, inductive reasoning, basic trigonometry, and three-dimensional geometry are also developed. This course will provide geometry students a course with more depth to prepare them for Algebra 2 Honors.
Algebra 2*
Algebra 2 is a course that builds on concepts learned in Algebra 1 and Geometry. It develops advanced algebra skills in the study of polynomials, rational expressions, and other equations and inequalities. Reading with comprehension is essential as students solve real world problems. A scientific or graphing calculator is required for certain topics. This course will prepare students for Pre-Calculus.

GRADE LEVEL: 9-12
CATEGORY: Fulfills 1 year of Math requirement
PREREQUISITE: Algebra 1 and Geometry
LENGTH: 1 Year

Pre-Calculus
Pre-Calculus is a course for students interested in the physical sciences, physics, engineering, mathematics, or other careers that require strong quantitative and mathematics skills. Areas of study include analytic geometry, inequalities, polynomials, trigonometric functions and equations, vectors, complex numbers, logarithmic and exponential functions, sequences, and graphing. Reading with comprehension is essential as students acquire stronger problem-solving skills. A graphing calculator is required. This course will prepare students for Calculus.

GRADE LEVEL: 9-12
CATEGORY: Fulfills 1 year of Math requirement
PREREQUISITE: Geometry and Algebra 2
LENGTH: 1 Year

AP Calculus BC
AP Calculus BC is a rigorous, college-level course that includes all calculus topics designated by the AP Program of the College Board. It is equivalent to two semesters of college-level calculus. Successful performance on the AP Calculus BC examination allows students to receive credit for college calculus. Areas of study include all topics covered in AP Calculus AB, as well as additional advanced calculus topics including polynomial approximations and series, vectors, parametric and polar expressions, and more extensive techniques of integration. Graphing calculators are required. This course will prepare students to take the AP Calculus BC examination in May. Visit [http://apcentral.collegeboard.com](http://apcentral.collegeboard.com) for additional information.

GRADE LEVEL: 9-12
CATEGORY: Fulfills 1 year of Math requirement
PREREQUISITE: Pre-Calculus with recommendation of instructor or Pre-Calculus honors
LENGTH: 1 Year

AP Statistics
AP Statistics is a rigorous, college-level course that includes all statistics topics designated by the AP Program of the College Board. Students are exposed to four broad conceptual themes identified by the College Board: exploring data, sampling and statistical inference. A graphing calculator is required. This course will prepare students to take the AP Statistics examination in May.

GRADE LEVEL: 9-12
CATEGORY: Fulfills 1 year of Math requirement
PREREQUISITE: Algebra 2
LENGTH: 1 Year
Introduction to Computer Science

This introductory computer science course covers five major topics including Computer Systems, Networks and Internet, Data and Analysis, Algorithms and Programming and the Impacts of Computing. Students will learn how to create technology-based solutions, like creating an algorithm to solve a real-world problem. They will also learn how to decompose (break-down) the steps needed to solve a problem into a precise sequence of instructions. This course would be a good starting point for students interested in taking higher level computer science courses or for just getting a general introduction to the computer science field.
GRADE LEVEL: 9-12
CATEGORY: Math Elective
PREREQUISITE: None
LENGTH: One Trimester

Computer Science Principles

Computer Science Principles (CSP) is a PLTW Dual credit Kirkwood Academy course designed to implement the College Board’s new AP Computer Science Principles framework. Students work in teams to develop computational thinking and solve problems. The course does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

AP Computer Science

AP Computer Science develops skills necessary to take more advanced computer science courses at the college level in order to be competitive in a technologically advanced and globally competitive marketplace. It is comparable to a first-year, semester-long course offered in a university. Students will use the Java language to develop applications to solve both mathematical and real-world problems. Students enrolled in this course should have prior programming experience or be highly motivated. This course will prepare students to take the AP Computer Science examination in May.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Recommended completion of or current enrollment in Algebra 2 or completion of Computer Science Principles
LENGTH: 1 Year

AMPS – The Art of Mathematical Problem Solving (West High only)

AMPS is a course that will address topics central to mathematical development that are beyond the scope of the standard college preparatory curriculum. Emphasis will be placed on techniques of formal proof, problem solving, the art of mathematical communication, and team approaches to solving problems. Students will be stimulated to learn through challenges and through the preparation for competition. With permission of instructor, students may enroll for a trimester at a time or on an independent-study basis. This course can also be taken multiple times, with topics subsequent to those studied in the initial course. This course will provide students with strategies for approaching, analyzing, and solving problems.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Geometry Honors
LENGTH: 1 Year

Music

Bass Choir

Little Hawk Singers (City)/Bass Choir (West)/Bass Clef Choir (Liberty) is a non-auditioned choir for all bass clef voices. All freshmen bass clef voices will be assigned to this choir. They will sing four concerts each year, with the focus of the class on producing a healthy choral tone; understanding music fundamentals; and singing fun, challenging bass clef choral music.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester repeating at the discretion of the director. Repeating is encouraged to prepare for the auditioned choirs.

Treble Choir

Treble Choir (City)/Treble Clef Choir (Liberty) is a non-auditioned choir for all treble clef voices. All freshmen treble voices will be assigned to this choir. They sing four concerts each year, with the focus of the class on producing a healthy choral tone; understanding music fundamentals; and singing fun, challenging treble clef choral music.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester repeating at the discretion of the director. Repeating is encouraged to prepare for the auditioned choirs.

Advanced Treble Choir

Advanced Treble Choir (City)/Virtuosa (West)/Bella Voce (Liberty) is an auditioned choir made up of treble singers in grades 10-12 who exhibit excellent vocal tone and a basic understanding of the music fundamentals. It will be offered when the number of singers in the program dictates it is necessary. They will perform four concerts each year and sing advanced choral literature. Students in this choir will be encouraged to audition for a spot in an All-State quartet and sing in our Solo/Small Ensemble Festival in the spring.
GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: A basic understanding of music literacy concepts (sight-reading) is expected. The student must demonstrate a desire for musical growth and a strong classroom work ethic.
LENGTH: Year-long enrollment is expected to maintain the continuity and high-performance level of this choir. Repeated enrollment at the discretion of the director.

Advanced Mixed Choir

Advanced Mixed Choir (West Only)

Concert Choir is an auditioned choir made up of singers in grades 10-12 who exhibit excellent vocal tone and a basic understanding of the music fundamentals. It will be offered when the number of singers in the program dictates it is necessary. They will perform four concerts each year and sing advanced choral literature. Students in this choir will be encouraged to audition for a
spot in an All-State quartet and sing in our Solo/Small Ensemble Festival in the spring.

GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: A basic understanding of music literacy concepts (sight-reading) is expected. The student must demonstrate a desire for musical growth and a strong classroom work ethic.
LENGTH: Yearlong enrollment is expected to maintain the continuity and high-performance level of this fine choir. Repeated enrollment at the discretion of the director.

Select Mixed Choir

Concert Choir (City)/West Singers (West)/ Liberty Singers (Liberty) is a select auditioned choir made up of singers in grades 11-12 who exhibit excellent vocal tone and display advanced music literacy. They will perform four concerts each year, occasional extra concerts, and will sing advanced choral literature. Students in this choir will be encouraged to audition for a spot in an All-State quartet and sing in our Solo/Small Ensemble Festival in the spring.

GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: Previous study or consent of director.
LENGTH: 1 Year

9th-12th Grade Band

(City & West High only)

During the beginning of the first trimester, these students will rehearse together as one marching band with the focus on basic marching band techniques and performing at home football and other marching events. All students in this band will have the opportunity to audition for placement into one of ability-based concert bands for the second and third trimesters. These concert ensembles will focus on the analysis and performance of standard and advanced high school band music and preparation of several formal concerts. Attendance at all performances is a required and graded part of the curriculum of this class.

GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: Previous study or consent of director.
LENGTH: 1 Year

Philharmonic Orchestra

(City & West High only)

Philharmonic focuses on developing intermediate orchestral techniques such as advancing bow Techniques. Students will prepare repertoire by a variety of composers and are required to participate in all scheduled performances. Students will register for all three trimesters and improve their skills through individual practice and lessons. Students work toward the goal of attaining membership in Symphony Orchestra.

GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Participation in Junior High Orchestra and audition with the director
LENGTH: 1 year

AP Music Theory

The AP Music Theory class is structured to be comparable in content and expected level of accomplishment to a first-year college course in Music Theory. The course will integrate the study of melody, harmony, texture, rhythm, and form. Students will spend class time analyzing notated music, developing aural (listening) skills, sight singing, and composition. The successful student will leave the course being able to recognize and describe basic materials and processes of music as performed or presented in a musical score. A wide variety of instrumental and vocal styles will be explored, focusing on music of the common practice period, roughly 1600-1900. An
Exploratory Music
(Pilot Course at City High)
Exploratory Music is a course designed with the student in mind. Students will explore the art of world drumming and form a drumming ensemble over the course of a trimester. Additionally, students will create electronic music that resonates with the styles of today’s popular music. Students will also voice their opinions on the types of music they want to study and have ownership over the direction of their music education in this class. There are multiple performance opportunities in this class including after school performances and in-school performances.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Music Fundamentals for Digital Music Production
(Pilot Course at West High)
Students without any formal music training are encouraged to enroll. Students will be taught the fundamentals of musical scales, chords, and rhythm to the extent necessary to interface and create music on a Digital Audio Workstation (Logic Pro X). Students will learn the basics of recording sound through a microphone as well as inputting pitches using a MIDI keyboard and percussion instruments through a drum pad.

Physical Education
Team and Recreational Activities*
Students will receive units designed to try lifetime activities from personal conditioning to individual and team sport activities. They will learn basic skills and concepts in those sports and activities along with physical conditioning and wellness activities. Fitness and health concepts will be included as well. The use of heart rate monitors and/or pedometers to help with the understanding and value of exercise in an appropriate heart rate zone.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Performance PE 1
This course is set up to provide structured and progressive lessons for students seeking high intensity training. Students will show proper technique and weight increases by the end of the trimester. Students will learn the skills necessary to perform the Olympic lifts and weight training skills. Plyometric, tabatas, circuit training and a variety of activities to promote lifetime fitness will be included.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester
with the assistance of a choreographer. The class will culminate in an evening performance in the auditorium.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: None  
**LENGTH**: 1 Trimester

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### Project Lead the Way

#### Intro to Engineering Design  
**Kirkwood CC Credit Course**

Students interested in engineering should take this class to practice the "Design Process" and documentation procedures used in all other Project Lead the Way courses. Emphasis is on product design and the use of CAD (Autodesk Inventor) to model, document and communicate design concepts to clients and manufacturers through prints and presentations. Field trips and classroom visits by professionals as well as job shadows are provided to give exposure to career opportunities.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: None  
**LENGTH**: 1 Year

#### Principles of Engineering  
**Kirkwood CC Credit Course**

This is a Project Lead the Way® class. This pre-engineering course helps students understand the field of engineering/ engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. Other topics in the class include Engineering Systems and Robotics, Strength of Materials, Power and Energy, Kinematics, Statics, Computer Programming, and Engineering for Reliability.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Algebra I.  
**LENGTH**: 1 Year

#### Civil Engineering & Architecture  
**Kirkwood CC Credit Course**

In this course students will explore the design of residential and commercial building projects. You will apply your knowledge in topics such as building components, structural design, energy efficiency, storm water management, site surveys and soil analysis. Students will work in design teams, use communication methods, apply engineering standards, and produce technical documentation. In addition, students will use professional 3D design software to design and document solutions for major course projects.

**GRADE LEVEL**: 10-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Introduction to Engineering Design, or Principles of Engineering.  
**LENGTH**: 1 Year

#### Digital Electronics  
**City High only**  
**Kirkwood CC Credit Course**

Digital Electronics is the study of electronic circuits that are used to process and control digital signals. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Utilizing the activity-project-problem-based methods of all PLTW courses, students will analyze, design, and build digital electronic circuits. While implementing these designs students will continually hone their interpersonal skills, creative abilities and understanding of the design process. The four main units covered in detail are: Foundations of Digital Electronics, Combinational Logic Analysis & Design, Sequential Logic Analysis & Design, and an Introduction to Microcontrollers.

**GRADE LEVEL**: 10-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Introduction to Engineering Design or Principles of Engineering  
**LENGTH**: 1 Year

#### Computer Integrated Manufacturing (CIM)  
**West High only**  
**Kirkwood CC Credit Course**

This course deepens the skills and knowledge of an engineering student within the context of efficiently creating the products all around us. Students build upon their Computer Aided Design (CAD) experience using Computer Aided Manufacturing (CAM) software. Using Computer Numerical Controlled (CNC) machines, students transform a block of raw material into a product designed by a student. Students learn and apply concepts related to integrating robotic systems such as Automated Guided Vehicles (AGV) and robotic arms into manufacturing systems.

**GRADE LEVEL**: 10-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Introduction to Engineering Design (IED) or Principles of Engineering (POE)  
**LENGTH**: 1 Year

#### Computer Science Principles  
**Kirkwood CC Credit Course**

Computer Science Principles (CSP) is a PLTW Dual credit Kirkwood Academy course designed to implement the College Board’s new AP Computer Science Principles framework. Students work in teams to develop computational thinking and solve problems. The course does not aim to teach mastery of a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity. Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Algebra 1 recommended  
**LENGTH**: 1 Year

#### Aerospace Engineering  
**City & West High only**

This is a Project Lead the Way® class. The major focus of this course is to expose students to the aerospace engineering field and related areas of study. Topics will include the history of the aerospace industry, aerodynamics, flight planning and navigation, aero- space materials and structures, propulsion, flight physiology, space travel and orbital mechanics, and systems engineering. Students will work in teams utilizing hands-on activities, projects, and problems developed by NASA. Students will also use design software and computer simulations to create solutions to proposed problems. Through these activities, projects, and problems, students will develop presentation, critical thinking, and data analysis skills that are relevant to a wide variety of subject areas. This is not a Dual Credit Class.

**GRADE LEVEL**: 10-12
**Science**

The 9th-grade science course is Earth and Space Science. Students who are planning to complete four years of high school science enrolling in courses such as Honors Chemistry, AP Biology, AP Chemistry, and AP Physics are permitted to enroll in Biology as a ninth-grade student in addition to the Earth and Space science course. These students should also be enrolled in Geometry as a 9th grade student in order to meet the math requirement for Honors Chemistry which will be taken in their 10th grade year.

Three PLTW courses, (Principles of Engineering, Environmental Sustainability and Aerospace Engineering) count toward science elective credit at West High, however they cannot be used to fulfill Science requirements.

**Earth and Space Science*\]**

Earth and Space Science is designed to give students an opportunity to investigate science and its relationship to society and the natural world through laboratories and activities. Emphasis is on the connection of earth and space science concepts to everyday interests and concerns. Topics of study will include Earth’s Place in the Universe, Earth’s Systems, and Earth and Human Activities. Student will be asked to behave as scientists, to think, ask questions, investigate problems, and design their own experiments.

**GRADE LEVEL: 9-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** None  
**LENGTH:** 1 Year

**Biology*\]**

Biology provides all students with experiences to foster understanding of life processes at the molecular, cellular, organism, ecosystem, and global levels. Students explore and analyze the interconnected central themes in biology: science as a process of knowing, structure, and function, change over time and the interdependence of nature. The course incorporates laboratory inquiry, use of higher order thinking skills, and investigation of current issues in technology and society.

**GRADE LEVEL: 9-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** None  
**LENGTH:** 1 Year

**Human Anatomy & Physiology**

This Course is an introduction to the structure and function of the human body. Students will study the basic principles of human anatomy and physiology with laboratory investigations of histology slides, organ models and dissections being the foundation of learning. As the anatomy of each system is studied, students will determine the principles of the functions for each body system and how they relate to each other.

**GRADE LEVEL: 10-12**  
**CATEGORY:** Science Elective  
**PREREQUISITE:** Biology  
**LENGTH:** 1 Year

**AP Biology**

AP Biology is a challenging second-year course intended to immerse students in the environment of a first-year college Biology class. The course centers on the four Big Ideas of AP Biology: 1. Evolution: the process of evolution drives the diversity and unity of life. 2. Energy: biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis. 3. Information: living systems store, retrieve, transmit and respond to information essential to life processes. 4. Systems: biological systems interact, and these systems and their interactions possess complex properties. Specific preparation for the AP Biology Exam is a feature of the course. Current or previous enrollment in chemistry or honors chemistry is strongly recommended.

**GRADE LEVEL: 10-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** Biology is a prerequisite; Chemistry or Physical Science can be a corequisite  
**LENGTH:** 1 Year

**Chemistry**

This chemistry course is based on the principles of chemistry and is designed for students who wish to pursue post-secondary education. It will include fundamental chemical concepts, broad coverage of mathematical relationships, stress laboratory inquiry and use of higher order thinking skills in the practical application of chemistry. Concepts will be developed through laboratory work, class discussions and activities, and homework. Tenth graders who took Biology as freshmen should take Honors Chemistry.

**GRADE LEVEL: 11-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** Algebra I  
**LENGTH:** 1 Year

**Honors Chemistry**

Honors Chemistry differs from Chemistry in rigor and pace. Honors Chemistry is a challenging laboratory-centered course designed to provide students the opportunity to study, investigate and experience basic chemical principles. Three major themes are addressed throughout the academic year: (1) properties of matter, (2) structure of matter, and (3) interaction of matter. This course is for those students who have high aptitude in math and science and an interest in pursuing science or science-related studies in college. Tenth graders who took Biology as freshmen should take Honors Chemistry.

**GRADE LEVEL: 10-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** Geometry  
**LENGTH:** 1 Year

**AP Chemistry**

AP Chemistry is a challenging and rigorous course which parallels a first-year college chemistry course. AP Chemistry is designed for highly motivated students interested in pursuing science related fields such as engineering, medicine, and the physical sciences. Some of the topics include Stoichiometry, Thermodynamics, Atomic Structure, Quantum Mechanics, Periodicity, Kinetics, and Electrochemistry. It follows the curriculum prescribed by the College Board and provides preparation for the AP Chemistry Exam.

**GRADE LEVEL: 11-12**  
**CATEGORY:** Fulfills Science requirement  
**PREREQUISITE:** Honors Chemistry  
**LENGTH:** 1 Year

**Physics**

This course seeks to build a strong conceptual understanding of physics. This is a base for all students to view nature more perceptively to see that surprisingly few relationships make up all its rules. Emphasis will be placed on the development of understanding through analysis of lab activities and in-class discussion. For
students wishing further study in science, it provides a conceptual base and a springboard to a greater involvement in sciences, as students will develop problem solving, critical thinking, and data analysis skills that are relevant to a wide variety of subject areas.

GRADE LEVEL: 11-12
CATEGORY: Fulfills Science requirement
PREREQUISITE: Geometry
LENGTH: 1 Year

AP Physics
Advanced Placement Physics is more rigorous than the standard physics course and the pace of the course is accelerated. Most of the topics covered are the same as the standard physics course with the addition of rotational dynamics, conservation of angular momentum and several others. The problems and labs are more challenging and require the application of advanced mathematics and creative problem-solving skills. This course is recommended for students who plan to pursue a science related field at a four-year college or university and will prepare them to take the Advanced Placement Physics exam in May.

GRADE LEVEL: 11-12
CATEGORY: Fulfills Science requirement
PREREQUISITE: Pre-Calculus or concurrent enrollment in Pre-Calculus
LENGTH: 1 Year

AP Physics 2
This second-year AP Physics course continues the rigorous college-level curriculum, with a focus on topics not covered in the first-year course. These topics include fluids, thermodynamics, electricity and magnetism, optics, quantum, and atomic & nuclear physics. The topics, laboratory investigations, and application questions involve high-level problem solving and analysis. This course will prepare students to take the Advanced Placement Physics 2 exam in May.

GRADE LEVEL: 11-12
CATEGORY: Science
PREREQUISITE: Pre-Calculus and AP Physics or General Physics
LENGTH: 1 Year

Physical Science*
While based upon the principles of chemistry and physics, the course will stress laboratory inquiry, conceptual relationships and higher order thinking skills. These principles are developed through laboratory experiences, class discussions, and homework. Emphasis is on the connection of chemistry and physics concepts to everyday interests and concerns. This course, along with Earth and Space Science and Biology, will fulfill the 3 years of science required for graduation.

GRADE LEVEL: 11-12
CATEGORY: Fulfills Science requirement
PREREQUISITE: Earth and Space Science and Biology
LENGTH: 1 Year

AP Environmental Science
Students in AP Environmental Science will investigate and explore the interrelationships of the natural world. Students will analyze environmental concepts and problems both natural and human-made, evaluate the risks associated with these problems, and examine alternative solutions for resolving or preventing these problems. Emphasis will be placed on laboratory investigations, fieldwork, and current issues in environmental science. AP Environmental Science is an interdisciplinary course embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

GRADE LEVEL: 11-12
CATEGORY: Science elective
PREREQUISITE: Biology is a prerequisite; Chemistry or Physical Science can be a corequisite
LENGTH: 1 Year

Social Studies
American Studies*
American Studies surveys the political, economic, social, and diplomatic development from the late 1800s to the present. The course examines the important issues, personalities, and events from the time-period and is designed so that students gain an understanding and appreciation of how the past and present are connected. Through a variety of learning opportunities, students will develop critical thinking skills that can be applied to past, present, and future events.

GRADE LEVEL: 9-10
CATEGORY: Fulfills U.S. History requirement
PREREQUISITE: None
LENGTH: 1 Year

World History for Tomorrow*
This course offers a survey of world history. We will examine major civilizations and events as they occurred in time. Within this chronological framework, we will present, discuss, and evaluate several important content themes, and help develop basic analytical skills. This course will address the following content themes: 1. Patterns and impacts of interaction among major societies: trade war, diplomacy, and international organizations. 2. Relationship of change and continuity across the time periods of this course. 3. Impact of technology and demography on people and the environment. 4. Systems of social structure and gender roles within and among societies. 5. Cultural and intellectual developments and interactions within and among societies. 6. Changes in functions and structures of states and in attitudes toward states and political identities.

GRADE LEVEL: 10-12
CATEGORY: Fulfills World History requirement
PREREQUISITE: None
LENGTH: 1 Year

U.S. Government I: Foundations and Principles*
In Government I, students will examine the foundations and principles of the American political system’s federal republic and analyze the political structure, power, and processes established by the U.S. Constitution. Students will study the rights guaranteed to citizens in our democratic society and the protections extended to each citizen in the Bill of Rights. Finally, students will examine their role in the democratic society through a study of the mass media, political parties, interest groups and campaigns/elections.

GRADE LEVEL: 11-12
CATEGORY: Fulfills 1 trimester of U.S. Government requirement
PREREQUISITE: None
LENGTH: 1 Trimester

U.S. Government II: Institutions and Policy*
In Government II, students will examine the structure, functions, and policies of American government at the national, state, and local levels. The class includes an analysis of the roles and responsibilities of each of the three branches of government in
all levels of government, with an emphasis on the creation and implementation of fiscal policy. Finally, students will build personal financial literacy skills through the study of topics such as debt, marketing, consumer protection, and financial responsibility. GRADE LEVEL: 11-12
CATEGORY: Fulfills 1 trimester of U.S. Government requirement
PREREQUISITE: None
LENGTH: 1 Trimester

Economics*
Economics studies how individuals, businesses, and governments deal with scarce resources. Students also focus on the development of personal financial literacy through the real-world exploration of topics such as savings, credit, debt, insurance, wealth building, investing and risk management. Emphasis is placed on the basic concepts, principles, and reasoning skills related to economic choices so that students will become informed consumers, workers, and citizens. GRADE LEVEL: 11-12
CATEGORY: Fulfills Economics requirement
PREREQUISITE: None
LENGTH: 1 Trimester

AP US History
The AP U.S. History course focuses on developing students’ understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society) that students explore throughout the course in order to make connections among historical developments in different times and places. GRADE LEVEL: 10-12 (City High Freshmen may register for this course if they achieved all A’s in 8th grade social studies classes AND achieved at the 97th percentile on the Iowa norms (or equivalent) composite score or equivalent.)
CATEGORY: Fulfills U.S. History requirement
PREREQUISITE: None
LENGTH: 1 Year

AP Human Geography (West & Liberty High only)
AP Human Geography presents high school students with the yearlong curricular equivalent of an introductory college course in human or cultural geography. The course is focused on applying geographic skills to real world issues and problems that are global and historical in scope. Emphasized topics include an analysis of population, politics, culture, agriculture, economic development, and urban development and their impacts on human activities and the environment. GRADE LEVEL: 9-12
CATEGORY: Fulfills World History requirement
PREREQUISITE: None
LENGTH: 1 Year

AP European History (West High only)
AP European History includes history as content and methodology, while examining historical continuity along with change and traditional themes: 1) political and diplomatic; 2) intellectual and cultures; and 3) economic and social history. The AP course is designed to cover the post-1450 period of European History, focusing on the transition from feudal systems to the rise of early modern and modern institutions, beliefs, and movements. This course has a high volume of reading and features many writing assignments. GRADE LEVEL: 10-12
CATEGORY: Fulfills World History requirement
PREREQUISITE: None
LENGTH: 1 Year

AP World History (City & Liberty High only)
AP World History is a yearlong course that expands students’ understanding of world history from 8000 B.C.E. to the present. The course has students analyze the content of world history for significant events, individuals, developments, and processes in six historical time periods. Students will work to develop the same historical thinking skills and methods used by historians when they study the past. The course focuses on five themes: the interaction between humans and the environment; the development and spread of cultures; state building, expansion, and conflict; the creation and growth of economic systems; and the formation and transformation of social structures. The course challenges students to make connections among different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania. GRADE LEVEL: 10-12
CATEGORY: Fulfills World History requirement
PREREQUISITE: (1) Completion of a Summer Reading Assignment; and (2) Recommendation of American Studies teacher.
LENGTH: 1 Year

AP Government & Politics
AP Government & Politics focuses on the fundamental principles, institutions, processes, and policies related to United States government and politics. Emphasized topics include the US Constitution, federalism, civil liberties & civil rights, linkage institutions, national policy-making institutions and the creation and implementation of public policy. GRADE LEVEL: 11-12
CATEGORY: Fulfills US Government requirement
PREREQUISITE: None
LENGTH: 1 Year

AP Economics: Micro and Macro
AP Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students’ familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. GRADE LEVEL: 11-12
CATEGORY: Fulfills Economics requirement
PREREQUISITE: None
LENGTH: 1 Year
The Civil War (City High only)
The Civil War has been called the defining moment in American History. By examining the political, social, and military aspects of the war, students will have a better understanding of why this war was fought. Students will study American society before and during the conflict, the North and South, Iowa’s role before and during the war, battles, and campaigns. Students will be responsible for one research paper and presentation.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Psychology I
The Psychology courses introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are encouraged to register for all three Psychology courses. Units of study include Psychology’s History and Approaches; Research Methods of Psychological Science; and Biological Bases of Behavior.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Trimester

Psychology II
Psychology II is a continuation of Psychology I with the continued focus of the scientific study of psychology. Units of study include Biological Bases of Behavior: Genetics; Sensation and Perception; States of Consciousness; Learning: Classical and Operant Conditioning, Thinking, Problem Solving, Creativity, and Language; Learning Intelligence-Testing and Individual Differences; and Motivation and Emotions, Stress, and Health.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITE: Psychology I
LENGTH: 1 Trimester

Psychology III
Psychology III is a continued focus on the scientific study of psychology and is the conclusion of the introductory course in the field of psychology. Units of study include Developmental Psychology; Personality; Abnormal Behavior; Treatment of Psychological Disorders; and Social Psychology.
GRADE LEVEL: 11-12

AP Psychology
This course provides training in and encourages students to apply the methods of social scientists to answer psychological questions about behavior and mental processes. Students may gain college credit for this introductory level-equivalent course by obtaining a qualifying score on the national exam in the spring. The course progresses through each of the major divisions of research as defined by the American Psychological Association (APA). Topics include history and approaches, research methods, biological bases of behavior, sensation and perception, states of consciousness, learning and memory, cognition, motivation and emotion, developmental psychology, abnormal psychology, treatment of psychological disorders and social psychology.
GRADE LEVEL: 11-12
CATEGORY: Elective
PREREQUISITES: None
LENGTH: 1 Year

Sociology
Sociology is a survey course that introduces students to the study of human society and social behavior. The study of sociology helps students gain a better understanding of their interpersonal relationships and the forces that affect us in social situations. Areas of study include an introduction to the field of sociology, concepts, and issues relevant to group and societal interactions and the influence of social conditions on people’s lives.
GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

Debate (West & Liberty High only)
This elective course will introduce students to the concepts of academic educational debating as is currently conducted in competitive high school speech and debate. Students will work on analysis and synthesis of information as well as skills in argumentation, research, delivery, refutation, and organization. Although not a requirement of the course, interested students are strongly encouraged to join the school’s debate team.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

Ethnic Studies: Identity, Power, Privilege and Action
Identity, Power, Privilege and Action is a trimester social studies elective that provides students with an in-depth examination of contemporary issues related to identity (race, ethnicity, gender, sexuality, class, among others), culture, power, and privilege. The course uses an empowerment model that prioritizes student-centered explorations and discussions of how identity, power and privilege connect to contemporary local, national, and international events. Questions such as “Who am I? Where did I come from? Where am I going? What kind of community member am I? What power do I have to make change in my community?” guide students throughout the course. The course culminates with the student’s creation of a service project that emphasizes awareness and/or action.
GRADE LEVEL: 10-12
CATEGORY: Elective
PREREQUISITE: American Studies, AP US History or AP Human Geography (or at teacher’s discretion)
LENGTH: 1 Trimester

World Language
Spanish I
Spanish I provides the foundation of language learning in listening comprehension, speaking, reading, and writing. Language is taught through a variety of everyday situations and within a context of the culture of Spanish-speaking countries. Areas of study include greetings and conversation, foods, numbers, dates, weather, seasons, family, home, school activities, friends, culture, everyday Spanish life, Spanish speaking countries, idiomatic phrases, pronunciation, and grammatical structures. Emphasis is placed on communication using appropriate grammar and vocabulary. Students participate in a variety of activities and do daily homework to develop an acceptable level of language proficiency. Students may elect Spanish II or Spanish II Honors after this course.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year
Spanish II
Spanish II expands students’ knowledge of the Spanish language and their understanding of the culture. A variety of everyday situations also let the student practice these new skills. Areas of study include conversational phrases, short stories, cultural studies and a variety of grammatical structures. Spanish II builds on the language foundation begun in Spanish I. Emphasis on communication with necessary grammar and vocabulary continues. Students may elect Spanish III or Spanish III Honors after this course. Students must pass each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish I
LENGTH: 1 Year

Spanish II Honors
Spanish II Honors is for highly motivated students who have shown proficiency and talent in language learning and are interested in expanding their knowledge of the language and culture. This course is intended for students with a high level of self-motivation who wish to explore grammar, vocabulary, and cultural topics in more depth than the Spanish II regular offering. This course builds on the foundation from Spanish I. The goal is to increase student proficiency in all skills through extensive speaking, reading, writing, listening, and cultural study. The class is conducted primarily in Spanish. Students may elect Spanish III or Spanish III Honors after this course. Students must pass each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish I and prior approval of a Spanish teacher
LENGTH: 1 Year

Spanish III
Spanish III reviews previously learned skills, expands vocabulary and introduces more complex language. Includes a comprehensive review of material presented in Spanish I and II. Students improve their language proficiency and broaden their understanding of Hispanic cultures. Other specific areas of study include art, and music, and how Hispanic cultures interact with our own. Legends, short stories, and various other materials are read. Much of the class is conducted in Spanish. Students may elect either Spanish IV or AP Spanish after this course. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish II
LENGTH: 1 Year

Spanish III Honors
Spanish III Honors is for highly motivated students who have demonstrated an ability to acquire language quickly and intend to improve and expand their skills and continue Spanish in college. Spanish III Honors reviews previous skills, expands vocabulary, and introduces more complex language. Students improve their language proficiency and broaden their understanding of Hispanic cultures through various units and projects. The class is conducted primarily in Spanish. Students may elect either Spanish IV or AP Spanish after this course. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish II Honors or prior approval of a Spanish III teacher
LENGTH: 1 Year

Spanish IV
Spanish IV strengthens and increases communication skills in the areas of speaking, listening, writing, and cultural understanding. In this course, students: are exposed to selected Spanish literature, history, and culture; increase vocabulary and language skills via exposure to authentic sources; and learn to write and speak spontaneously on different topics, implementing previously learned grammatical concepts. The course is conducted primarily in Spanish and is preparatory for college placement. Students must have a passing grade at the end of each trimester in order to continue to the next trimester or level of language study. Students who are enrolled in this course are eligible to participate in a two-week trip to Spain in March. Students may elect to take Spanish V or AP Spanish after this course.
GRADE LEVEL: 9-12
CATEGORY: Elective

AP Spanish
AP Spanish IV is intended for highly motivated students who aim to improve their skills and/or continue Spanish in college. The goal is to increase language proficiency in all skills through extensive speaking, reading, writing and listening, with cultural study. The course is conducted completely in Spanish. Given that the class is preparatory for college placement and achievement tests, students receive practice for the AP Spanish Language and Culture Exam. The curriculum is theme based and includes discussions about a wide variety of contemporary issues. Authentic listening and reading will be presented via Spanish television, newspaper articles, and magazines. Students who are enrolled in this course may elect to participate in a two-week trip to Spain in March.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish III Honors or prior approval of a Spanish III teacher
LENGTH: 1 Year

Spanish V (Seal of Biliteracy)
Spanish V (Seal of Biliteracy) is a continuation course for students who have completed either Spanish IV or AP Spanish IV. The course is intended for highly motivated students who wish to both improve and maintain their Spanish skills. The curriculum will include a continued development of literacy, auditory, oral and writing skills and will be aligned with the expectations required to achieve the Seal of Biliteracy. The course will be conducted completely in Spanish with an emphasis on advanced speaking and writing skills. Students who are enrolled in this course may apply to receive the Seal of Biliteracy upon completion of the course. Students continuing from the AP course will further their abilities on the language skills required for the AP Language and Culture Exams in May.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of Spanish IV or AP Spanish
LENGTH: 1 Year
French I
French I is the foundation for learning French language in listening, comprehension, speaking, reading, writing, and culture. Emphasis is on the use of proper grammar and vocabulary. Language is taught through everyday situations and within the context of the culture of French-speaking countries. Areas of emphasis include pronunciation, greetings and conversation, colors, numbers, dates, weather, seasons, vocabulary related to family, home, school, activities, and friends, cultural items, geography, everyday life, French songs, idiomatic phrases, grammar structures, the present tense of regular and irregular verbs, adjectives, and adverbs. Students participate in activities and do daily homework to develop language proficiency. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: None
LENGTH: 1 Year

French II
French II builds on the foundation begun in French I. Emphasis on the communication of the French language and culture. Grammar study is expanded to help the student learn to use the language. A variety of everyday situations allows the student to practice the language skills. Audio and video recordings are used to enrich the learning experience. Areas of emphasis include pronunciation, vocabulary, cultural structures, idiomatic phrases, regular and irregular verbs in the present, past, and future tenses, grammar structures including object pronouns, comparisons of adjectives and adverbs, use of the infinitive, foods and cooking, geography, short stories and plays. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of French I and teacher recommendation
LENGTH: 1 Year

French II Honors
French II Honors builds on the foundation begun in French I. Honors is for highly motivated students who have shown proficiency and talent in language learning and are interested in expanding their knowledge of the French language and culture. This course is intended for students with a high level of self-motivation. Emphasis on communication with necessary grammar and vocabulary continues. The class expands the students’ knowledge of the French language and culture. Grammar study is expanded to help the student learn to use the language. A variety of everyday situations allows the student to practice the language skills. Audio and video recordings are used to enrich the learning experience. Areas of emphasis include pronunciation, vocabulary, cultural structures, idiomatic phrases, regular and irregular verbs in the present, past, and future tenses, grammar structures including object pronouns, comparisons of adjectives and adverbs, use of the infinitive, foods and cooking, geography, short stories and plays. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of French II
LENGTH: 1 Year

French III
French III reviews previously learned skills, expands vocabulary and introduces more complex language. Students improve their language proficiency and broaden their understanding of French cultures. Much of the class is conducted in French. French III reviews previously learned skills, expands vocabulary and introduces more complex language and their use. Students improve their language proficiency and broaden their understanding of French cultures. Much of the class is conducted in French. French III continues the study of French and the communication skills begun in French I and II. Added emphasis is placed on reading, writing, and listening skills and a special emphasis on speaking skills in appropriate context for language practice. French III will include a review of grammatical structures previously learned and the study of reflexive verbs, relative pronouns, and the imperfect and future verb tenses as well as the conditional and subjunctive. In addition to the textbook, the course will include films, varied readings, as well as research projects. Students may elect either French IV or AP French after this course. Students must have a passing grade at the end of each trimester to continue to the next trimester or level of language study.
GRADE LEVEL: 9-12
CATEGORY: Elective
PREREQUISITE: Successful completion of French II and teacher recommendation
LENGTH: 1 Year

French IV
French IV strengthens and improves communication skills in the areas of speaking, writing, and cultural understanding. The course is conducted primarily in French with a strong cultural component to the curriculum. This course is preparatory for college placement. Students may elect to take AP French after this course. French IV stresses the application of previously acquired language skills. This class is theme based. Grammar is reviewed in every theme. Themes include relationships, city life, government, media, family, immigration, racism. Students will also read two novels. Authentic materials are utilized to help build communication skills. Special emphasis is
Students continuing from the AP course will this course may apply to receive the Seal of writing skills. Students who are enrolled in an emphasis on advanced speaking and will be conducted completely in French with achieve the Seal of Biliteracy. The course aligned with the expectations required to include a continued development of literacy, auditory, oral, and writing skills and will be working to improve and maintain their French skills. The AP French curriculum rotates; it is theme based and includes a grammar review, continued development of speaking, listening, reading and writing skills using authentic literature, film and a variety of materials from the Francophone world. Students will participate in discussions about contemporary issues facing French francophone societies. Students will work to prepare for the AP exam, college entrance/placement exams and travel to France for the optional spring break trip.

**AP French**
This AP French course is intended for students who wish to both improve and maintain their French skills. This AP French curriculum rotates; it is theme based and includes a grammar review, continued development of speaking, listening, reading and writing skills using authentic literature, film and a variety of materials from the Francophone world. Students will participate in discussions about contemporary issues facing French/ francophone societies. Students will work to prepare for the AP exam, college entrance/placement exams and travel to France for the optional spring break trip.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Successful completion of French III  
**LENGTH**: 1 Year

**French V (Seal of Biliteracy)**
French V (Seal of Biliteracy) is a continuation course for students who have completed either French IV or AP French IV. The course is intended for highly motivated students who wish to both improve and maintain their French skills. The curriculum will include a continued development of literacy, auditory, oral, and writing skills and will be aligned with the expectations required to achieve the Seal of Biliteracy. The course will be conducted completely in French with an emphasis on advanced speaking and writing skills. Students who are enrolled in this course may apply to receive the Seal of Biliteracy upon completion of the course. Students continuing from the AP course will further their abilities on the language skills required for the AP Language and Culture Exams in May.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: Successful completion of French IV or AP French  
**LENGTH**: 1 Year

**AP Capstone Seminar**  
**(City & West High only)**
AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision to craft and communicate evidence-based arguments.

**GRADE LEVEL**: 10-12  
**CATEGORY**: Elective  
**PREREQUISITE**: None  
**LENGTH**: 1 Year

**AP Capstone Research**  
**(City & West High only)**
AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a yearlong research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they research their question. Students explore their skill development, document their process, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

**GRADE LEVEL**: 10-12  
**CATEGORY**: Elective  
**PREREQUISITE**: AP Seminar  
**LENGTH**: 1 Year

**AP African American Studies**  
**(Pilot Course at City High)**
The College Board is piloting this new Advanced Placement course in African American Studies. This course will be structured in a thematic, chronological manner, covering the African continent pre-transatlantic slave trade through the present day. To participate in the pilot, all students enrolled in the course will be required to take the AP exam for the course, for which there will be no charge.

**GRADE LEVEL**: 11-12  
**CATEGORY**: Elective  
**PREREQUISITES**: None  
**LENGTH**: 1 Year

**How College Works**  
**Kirkwood CC Credit Course**
Explores individual strengths, strategies for solidifying personal responsibility, college readiness/academic success strategies, career readiness/vocational goals for students as they identify a college program or major. Emphasizes differences between high school and college expectations. Identifies appropriate career areas. Offers aids in taking and using placement tests for college admission and personal financial management.

**GRADE LEVEL**: 11-12  
**CATEGORY**: Elective  
**PREREQUISITE**: None  
**LENGTH**: 1 Semester

**iJAG**
iJAG offers a venue for students to interact with employers and community-based organizations through project-based learning. The iJAG program teaches 37 core competencies comprised of six skill sets: personal skills, leadership skills, communication skills, job attainment skills, job success skills and career development skills. The goal of iJAG is to engage students with classroom and project-based learning experiences that result in quality careers after graduation. iJAG works to develop workplace competencies in students that assist in their success in career/life transitions by providing individual career education, increasing academic achievement, and providing school-to-work transition by following up with students for one year following high school graduation.

**GRADE LEVEL**: 9-12  
**CATEGORY**: Elective  
**PREREQUISITE**: None  
**LENGTH**: 1 Year
Behavioral Health Studies
Dialectical Behavioral Training (DBT) in Schools is a research-based, proven effective approach for working with youth. The focus of this course is skills training for emotional problem solving for adolescents. Content taught in this course will include student learning: **Mindfulness** – how to focus attention, pay attention to one thing at a time and increase awareness of the present. **Emotion regulation** - increasing skills to reduce unpleasant emotions and learning skills to increase positive emotions. **Distress tolerance** - increase the ability to handle elevated emotions and reduce impulsiveness across different environments. **Interpersonal effectiveness** - develop and maintain better interpersonal relationships by improving assertiveness, reducing conflict, and increasing self-respect.

**GRADE LEVEL:** 9-12
**CATEGORY:** Elective
**PREREQUISITE:** Building teams will review requests for participation.
**LENGTH:** 1 trimester

Mentoring in Violence Prevention (MVP)
MVP uses the bystander model to target the role and responsibilities of friends, teammates, and classmates. The bystander model focuses on increasing awareness of coercive/violent events, increasing one’s sense of ownership and investment in the cessation of such behaviors and providing skills training to safely intervene. 11th & 12th grade student mentors are trained to lead 9th grade homeroom/advisory lessons on topics of violence prevention and how to be an active bystander.

**GRADE LEVEL:** 11-12
**CATEGORY:** Elective
**PREREQUISITE:** Building teams will review requests for participation.
**LENGTH:** 1st trimester

Aggression Replacement Therapy (City High only)
Aggression Replacement Training (ART) is a research-based, proven-effective approach for working with youth with anger issues. Aggression Replacement Training features three coordinated and integrated components:

Social Skills Training—Teaches participants what to do, helping them replace antisocial behaviors with positive alternatives.

Anger Control—Teaches participants what not to do, helping them respond to anger in a nonaggressive manner and rethink anger-provoking situations.

Moral Reasoning—Helps raise participants’ level of fairness, justice, and concern for the needs and rights of others.

**GRADE LEVEL:** 9-12
**CATEGORY:** Elective
**PREREQUISITE:** None
**LENGTH:** 1 Trimester

Peer Assistance and Leadership (PALs)
The Peer Assistance Leadership and Service (PALS) course is for selected high school students who are trained in community service, conflict resolution, and as peer helpers to work with other students in their own school and/or in feeder middle or elementary schools.

**GRADE LEVEL:** 11-12
**CATEGORY:** Elective
**PREREQUISITE:** None
**LENGTH:** 1 Year

AVID (Advancement Via Individual Determination)
AVID, which stands for Advancement Via Individual Determination, is a college readiness program designed to help students develop the skills they need to be successful in college. Students receive the additional academic, social, and emotional support that will help them succeed in their school’s most rigorous courses. The program places special emphasis on growing writing, critical thinking, teamwork, organization and reading skills. Students must complete an application to be accepted into this course.

**GRADE LEVEL:** 9-12
**CATEGORY:** Elective
**PREREQUISITE:** None
**LENGTH:** 1 Year

Tech Support: Media Production* (Tate High only)
This is an entry-level production course. Students will develop the ability to capture images, video, and audio and to edit those elements together to communicate a message or tell a story.

**GRADE LEVEL:** 9-12
**CATEGORY:** No Credit Awarded
**PREREQUISITE:** Valid Learner’s Permit
**LENGTH:** 1 Trimester

*NOTE: Courses marked with an asterisk (*) are offered at Tate High School in addition to City, West, and Liberty, unless otherwise noted.

English Language Learner Program
The English Language Learner Program offers high quality English language instruction and support for English Learners to meet academic standards through curriculum aligned to IA Core and English Language Proficiency Standards in all subject areas. Students who are not yet proficient in the English language are assessed according to state/federal guidelines and placed in language development courses as part of their general education program. Courses are offered for beginning, intermediate, and advanced English learners and provide explicit instruction in all of the language domains (listening, speaking, reading, and writing) with an emphasis on developing academic language proficiency. Sheltered content courses for English Learners provide support in learning core subject matter while promoting language development.

Driver’s Education
All students can receive driver’s education through their resident school district, through a private company, or through Parent Taught Driver’s Education (https://iowadot.gov/mvd/driverseducation/parent-taught). ICCSD contracts with Kirkwood Community College for Driver’s Education to offer driver’s education onsite at the three high schools, either before or after school, along with one driving period each week during the school day. The course lasts one trimester. Students pay Kirkwood directly for the cost of the program. Students who qualify for free or reduced-price lunch can apply to have this fee waived. Students need to contact their resident school’s counseling department in January of the year preceding desired enrollment and must have a valid learner’s permit.

**GRADE LEVEL:** 9-12
**CATEGORY:** No Credit Awarded
**PREREQUISITE:** Valid Learner’s Permit
**LENGTH:** 1 Trimester

*NOTE: Courses marked with an asterisk (*) are offered at Tate High School in addition to City, West, and Liberty, unless otherwise noted.
**CAREER PATHWAYS**

The next section of this Program of Studies contains information on Career Pathways for each of the 17 Career Clusters outlined in the National Career Clusters Framework. Through a joint venture with Kirkwood Community College, ICR Future, Grant Wood AEA, and the Iowa City Community School District, each pathway was developed to delineate high school coursework and activities, along with post-secondary opportunities, aligned to the career cluster. These documents are designed to assist students in thinking about and planning for possible future careers. Students are always encouraged to work with their school counselors as an essential partner in this process. School counselors will have the most up to date information and personalized recommendations.
A career in agriculture, food, and natural resources requires certain skills and education depending on job requirements. Skills include promotion, processing, marketing, distribution, financing, and development of agricultural commodities including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

### Bachelor's Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Studies</td>
<td>Environmental Engineering</td>
<td>$76,050</td>
</tr>
<tr>
<td>Food Science</td>
<td>Health and Food Inspector</td>
<td>$74,500</td>
</tr>
<tr>
<td>Animal Science</td>
<td>Animal Scientist</td>
<td>$76,970</td>
</tr>
</tbody>
</table>


### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Geospatial Technology</td>
<td>Mapping Technician</td>
<td>$45,000</td>
</tr>
<tr>
<td>Agriculture Business</td>
<td>Crop Scouting</td>
<td>$49,000</td>
</tr>
<tr>
<td>Agriculture Production Management</td>
<td>Agriculture Sales</td>
<td>$33,000</td>
</tr>
<tr>
<td>Diesel Ag Technology</td>
<td>Heavy Diesel Equipment Technician</td>
<td>$41,000</td>
</tr>
<tr>
<td>Diesel Truck Technology</td>
<td>Diesel Mechanic</td>
<td>$40,000</td>
</tr>
<tr>
<td>Golf Course and Athletic Turfgrass Management</td>
<td>Grounds Manager</td>
<td>$47,000</td>
</tr>
<tr>
<td>Veterinary Technology</td>
<td>Vet Tech</td>
<td>$32,000</td>
</tr>
<tr>
<td>Humane Officer</td>
<td>Animal Control Officer</td>
<td>$32,000</td>
</tr>
<tr>
<td>Landscape Construction and Design</td>
<td>Landscape Architect</td>
<td>$54,900</td>
</tr>
<tr>
<td>Parks and Natural Resources</td>
<td>Gaming Officer</td>
<td>$32,600</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Treatment Operator</td>
<td>$45,000</td>
</tr>
<tr>
<td>Kirkwood Diploma</td>
<td>Sample Career</td>
<td>Salaries</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Agriculture Production</td>
<td>Seed Production</td>
<td>$35,000</td>
</tr>
<tr>
<td>Pet Grooming</td>
<td>Pet Groomer</td>
<td>$27,000</td>
</tr>
<tr>
<td>Golf Course and Athletic Turfgrass Management</td>
<td>Grounds Maintenance</td>
<td>$37,500</td>
</tr>
<tr>
<td>Veterinary Assistant</td>
<td>Vet Assistant</td>
<td>$24,000</td>
</tr>
<tr>
<td>Animal Control Assistant</td>
<td>Animal Care Assistant</td>
<td>$24,500</td>
</tr>
<tr>
<td>Landscape Construction and Design</td>
<td>Landscape Worker</td>
<td>$27,700</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Environmental Technician</td>
<td>$31,000</td>
</tr>
<tr>
<td>Water Treatment Specialist</td>
<td>Water Treatment Specialist</td>
<td>$31,000</td>
</tr>
<tr>
<td>Wastewater Specialist</td>
<td>Wastewater Operator</td>
<td>$39,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Certificates</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Geospatial Technology</td>
<td>Farm Machinery Operator</td>
<td>$35,200</td>
</tr>
<tr>
<td>Small Scale Food Production</td>
<td>Farm Laborer</td>
<td>$27,700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Career Academies</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Sciences</td>
<td>Field Technician</td>
<td>$26,400</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Operator</td>
<td>$24,950</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018

High School Courses
- Biology
- Culinary Arts 1, 2 & 3
- Intro to Business

High School Related Activities and Clubs
- Internships
- Job Shadows
- Garden Club
Architecture & Construction

A career in architecture and construction requires certain skills and education depending on job requirements. Skills include designing, planning, managing, building, and maintaining the built environment.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>Architect</td>
<td>$83,750</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Civil Engineer</td>
<td>$81,850</td>
</tr>
<tr>
<td>Industrial Design</td>
<td>Electronic Engineer</td>
<td>$69,800</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>Industrial Engineer</td>
<td>$78,950</td>
</tr>
<tr>
<td>Construction Management</td>
<td>Construction and Building Inspector</td>
<td>$62,130</td>
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### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture Technology</td>
<td>Architectural Drafter</td>
<td>$50,900</td>
</tr>
<tr>
<td>CAD/Mechanical Engineering Technology</td>
<td>CAD Drafter</td>
<td>$54,900</td>
</tr>
<tr>
<td>Construction Management</td>
<td>First Line Supervisor</td>
<td>$61,200</td>
</tr>
<tr>
<td>Interior Design</td>
<td>Interior Designer</td>
<td>$40,000</td>
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</tbody>
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### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD/Mechanical Engineering Technology</td>
<td>Mechanical Engineering Technician</td>
<td>$49,900</td>
</tr>
<tr>
<td>Carpentry</td>
<td>Carpenter</td>
<td>$42,900</td>
</tr>
<tr>
<td>HVAC Installer</td>
<td>HVAC Installer</td>
<td>$50,500</td>
</tr>
<tr>
<td>Plumbing Pre-Apprenticeship</td>
<td>Plumber (if followed by an apprenticeship)</td>
<td>$50,200</td>
</tr>
</tbody>
</table>

### Kirkwood Certificates

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Estimator</td>
<td>Estimator</td>
<td>$35,000</td>
</tr>
<tr>
<td>Construction Supervision Certificate</td>
<td>Construction Coordinator</td>
<td>$50,950</td>
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</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACE: Construction Trades (Pre-Apprenticeship)</td>
<td>Entry Level Construction Laborer</td>
<td>$37,050</td>
</tr>
<tr>
<td>ACE: Architectural and Engineering Design (Pre-Apprenticeship)</td>
<td>Design Assistant</td>
<td>$30,100</td>
</tr>
</tbody>
</table>

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### High School Courses

- Fundamental of CAD
- Fundamentals of Electricity 1 & 2
- Introduction to ACE
- Construction Lab
- Residential Construction
- Construction Materials Processing (Woodworking)
- Advanced Construction Materials (Adv. Woodworking)
- Construction Technology
- Architectural Plans and Specifications
- Introduction to Engineering Design
- Principles of Engineering
- Civil Engineering & Architecture
- Aerospace Engineering
- Environmental Sustainability
- Digital Electronics
- Computer Integrated Manufacturing
- Physics
- Environmental Science
- Physical Science
- Interior Design 1 & 2

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### High School Related Activities and Clubs

- Internships
- Job Shadows
- ASTEM
- ACE Mentor Program
- Project Lead the Way
- Business Professional of America
- Physics Team
- Junior Engineering Technical Society
- Robotics Club

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*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov, 2018*
A career in arts, audio/visual technology and communications requires certain skills and education depending on job requirements. Skills include designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcasting</td>
<td>News Anchor</td>
<td>$50,850</td>
</tr>
<tr>
<td>English</td>
<td>Technical Writer</td>
<td>$54,650</td>
</tr>
<tr>
<td>Theater</td>
<td>Theatre Actor</td>
<td>$50,900</td>
</tr>
<tr>
<td><strong>Kirkwood Associate’s Degree</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Communication Technology</td>
<td>Graphic Designer</td>
<td>$45,700</td>
</tr>
<tr>
<td>Interior Design</td>
<td>Interior Designer</td>
<td>$40,000</td>
</tr>
<tr>
<td>Web Technologies</td>
<td>Desktop Publisher</td>
<td>$41,500</td>
</tr>
<tr>
<td><strong>Kirkwood Career Academies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts and Sciences Academy</td>
<td>Camera Operator</td>
<td>$32,450</td>
</tr>
<tr>
<td>Graphic Communication Technology Academy</td>
<td>Merchandise Display</td>
<td>$28,800</td>
</tr>
<tr>
<td><strong>Kirkwood Certificates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Media Marketing</td>
<td>Media Technician</td>
<td>$34,400</td>
</tr>
<tr>
<td>Web Development</td>
<td>Website Developer</td>
<td>$58,000</td>
</tr>
<tr>
<td>Web Design</td>
<td>Website Designer</td>
<td>$47,700</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*

### Kirkwood Community College

- **Bachelor’s Degree from Iowa Universities and Colleges**
  - Broadcasting: News Anchor ($50,850)
  - English: Technical Writer ($54,650)
  - Theater: Theatre Actor ($50,900)
- **Kirkwood Associate’s Degree**
  - Graphic Communication Technology: Graphic Designer ($45,700)
  - Interior Design: Interior Designer ($40,000)
  - Web Technologies: Desktop Publisher ($41,500)
- **Kirkwood Career Academies**
  - Arts and Sciences Academy: Camera Operator ($32,450)
  - Graphic Communication Technology Academy: Merchandise Display ($28,800)
- **Kirkwood Certificates**
  - Social Media Marketing: Media Technician ($34,400)
  - Web Development: Website Developer ($58,000)
  - Web Design: Website Designer ($47,700)

### High School Courses

- Art Forms
- Black and White Drawing
- Exploring Color Through Drawing
- Expressive Drawing
- Creative Writing
- Band, Orchestra, Choir, and Theater
- Intro to Business
- Entrepreneurship
- Painting
- Digital Photography
- Advanced Photography
- Graphic Design
- Advanced Graphic Design
- Digital Photography
- Video Production 1 & 2
- AP Art and Design
- Web Design
- Interior Design 1 & 2
- Public Speaking
- Media Literacy & Communications

### High School Related Activities and Clubs

- Job Shadows
- Internships
- School Play/Musical
- Art Club
- Debate Club
- Speech Club
- Newspaper
- Yearbook
Business Management & Administration

A career in business management and administration requires certain skills and education depending on job requirements. Skills include planning, organizing, directing, and evaluating business functions essential to productive business operations.

### Advanced Degree

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's Degree in Business Administration (MBA)</td>
<td>Executive Manager/CEO</td>
</tr>
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</table>

### Bachelor's Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Operations Manager</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Administrative Services Manager</td>
</tr>
<tr>
<td>Business Information Systems</td>
<td>Business Analytics &amp; Info Systems</td>
</tr>
<tr>
<td>Business Management</td>
<td>Compensation &amp; Benefits Manager</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Human Resource Manager</td>
</tr>
</tbody>
</table>

*Additional Bachelor’s Degrees include: Business Teaching, Entrepreneurship, International Business*

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration: Accounting</td>
<td>Accounting Clerk</td>
</tr>
<tr>
<td>Business Administration: Financial Services</td>
<td>Credit Counselor</td>
</tr>
<tr>
<td>Business Administration: Management</td>
<td>Community Service Manager</td>
</tr>
<tr>
<td>Administrative Management</td>
<td>Executive Assistant</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>HIT Technician</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Assistant</td>
<td>Office Clerk</td>
</tr>
<tr>
<td>Medical Coding</td>
<td>Medical Secretary</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>Medical Transcriptionist</td>
</tr>
</tbody>
</table>

### Kirkwood Certificates

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Accounting</td>
<td>Bookkeeper</td>
</tr>
<tr>
<td>Global Perspectives in Business</td>
<td>Shipping, Receiving, and Traffic Clerks</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Business Continuity Planner</td>
</tr>
<tr>
<td>Human Resources</td>
<td>HR Assistant</td>
</tr>
<tr>
<td>Project Management</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>Medical Transcriptionist</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Business Administration</td>
<td>Receptionist</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Mail Clerk</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
A career in education and training requires certain skills and education depending on job requirements. Skills include planning, managing, and providing education and training service, and related learning support services.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Education</td>
<td></td>
</tr>
<tr>
<td>Secondary Education</td>
<td></td>
</tr>
<tr>
<td>Organizational Leadership</td>
<td></td>
</tr>
</tbody>
</table>

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education</td>
<td>$41,600</td>
</tr>
<tr>
<td>Exercise Science and Wellness</td>
<td>$32,800</td>
</tr>
<tr>
<td>Liberal Arts – Education w/ Transfer Option</td>
<td></td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education</td>
<td>$25,800</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Education Transfer</td>
<td>$24,400</td>
</tr>
<tr>
<td>Arts and Science Academy</td>
<td>$20,500</td>
</tr>
</tbody>
</table>

### Kirkwood Certificates

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Paraeducator</td>
<td>$24,900</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
A career in finance requires certain skills and education depending on job requirements. Skills include planning services for financial and investment planning, banking, insurance, and business financial management.

**Bachelor’s Degree from Iowa Universities and Colleges**

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Accountant</td>
<td>$66,500</td>
</tr>
<tr>
<td>Finance</td>
<td>Financial Analyst</td>
<td>$78,450</td>
</tr>
<tr>
<td>Financial Counseling and Planning</td>
<td>Loan Officer</td>
<td>$69,100</td>
</tr>
</tbody>
</table>

**Kirkwood Associate’s Degree**

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration: Accounting</td>
<td>Accounting Clerk</td>
<td>$37,000</td>
</tr>
<tr>
<td>Business Administration: Financial Services</td>
<td>Financial Clerk</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

**Kirkwood Certificates**

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Accounting</td>
<td>Bookkeeper</td>
<td>$35,000</td>
</tr>
</tbody>
</table>

**Kirkwood Career Academies**

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Business Administration</td>
<td>Bank Teller</td>
<td>$27,050</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Cashier</td>
<td>$24,850</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
Government &
Public Administration

A career in government and public administration requires certain skills and education depending on job requirements. Skills include planning and performing government functions at the local, state, and federal levels, including governance, national security, foreign service, planning, revenue and taxation, and regulations.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Planning</td>
<td>Urban and Regional Planners</td>
<td>$64,980</td>
</tr>
<tr>
<td>Public Administration</td>
<td>Assessor</td>
<td>$79,050</td>
</tr>
<tr>
<td>Accounting</td>
<td>Auditor</td>
<td>$66,500</td>
</tr>
</tbody>
</table>

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration</td>
<td>City Clerk</td>
<td>$43,000</td>
</tr>
<tr>
<td>Business Administration: Management</td>
<td>Chamber of Commerce Chair</td>
<td>$50,000</td>
</tr>
<tr>
<td>Administrative Management</td>
<td>Executive Assistant</td>
<td>$45,500</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Treatment Operator</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Assistant</td>
<td>Office Assistant</td>
<td>$34,000</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Business Administration</td>
<td>Receptionist</td>
<td>$28,400</td>
</tr>
<tr>
<td>Arts and Sciences</td>
<td>Mail Clerk</td>
<td>$29,100</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Operator</td>
<td>$24,950</td>
</tr>
</tbody>
</table>

---

**High School Courses**

- US History
- World History
- Public Speaking
- State and Local Government
- National Government
- Economics
- Advanced AP history and government classes also available

**High School Related Activities and Clubs**

- Internships
- Job Shadows
- Model UN
- Student Senate
- Mock Trial

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
A career in health sciences requires certain skills and education depending on job requirements. Skills include planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

### Advanced Degree

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters degree in Nursing</td>
<td>Nurse Practitioner</td>
<td>$104,150</td>
</tr>
<tr>
<td>Masters degree in Health Science</td>
<td>Physician Assistant</td>
<td>$110,150</td>
</tr>
<tr>
<td>Doctor of Medicine</td>
<td>Family and General Practice Medical Doctor</td>
<td>$241,070</td>
</tr>
</tbody>
</table>

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>Nurse (with BSD degree)</td>
<td>$70,650</td>
</tr>
<tr>
<td>Dietetics</td>
<td>Dietitian</td>
<td>$50,500</td>
</tr>
<tr>
<td>Healthcare Administration</td>
<td>Healthcare Administrator</td>
<td>$91,700</td>
</tr>
<tr>
<td>Nursing</td>
<td>Nurse (with BSN degree)</td>
<td>$70,650</td>
</tr>
</tbody>
</table>

*Additional Bachelor’s Degrees include: Culinary Food Science, Diet and Exercise, Food Science & Global Health Studies*

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Assisting</td>
<td>Dental Assistant</td>
<td>$39,900</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>Dental Hygienist</td>
<td>$68,700</td>
</tr>
<tr>
<td>Dental Technology</td>
<td>Dental Laboratory Tech</td>
<td>$41,500</td>
</tr>
<tr>
<td>Diagnostic Assistant (Radiologic Technology)</td>
<td>Radiologic Technologist</td>
<td>$51,700</td>
</tr>
<tr>
<td>Electroneurodiagnostic Technology</td>
<td>Neurodiagnostic Technologist</td>
<td>$41,300</td>
</tr>
<tr>
<td>Exercise Science &amp; Wellness</td>
<td>Fitness Trainer</td>
<td>$32,800</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>Health Information Technician</td>
<td>$40,500</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>Medical Assistant</td>
<td>$34,000</td>
</tr>
<tr>
<td>Medical Laboratory Technology</td>
<td>Clinical Lab Technician</td>
<td>$48,400</td>
</tr>
<tr>
<td>Associate Degree Nursing, RN</td>
<td>Critical Care Nurse</td>
<td>$57,900</td>
</tr>
<tr>
<td>Occupational Therapy Assistant</td>
<td>OTA</td>
<td>$57,400</td>
</tr>
<tr>
<td>Paramedic</td>
<td>Paramedic</td>
<td>$40,000</td>
</tr>
<tr>
<td>Physical Therapy Assistant</td>
<td>PTA</td>
<td>$47,500</td>
</tr>
<tr>
<td>Respiratory Therapist</td>
<td>Respiratory Therapist</td>
<td>$52,800</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>Surgical Technologist</td>
<td>$41,700</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
# Health Sciences

<table>
<thead>
<tr>
<th>Kirkwood Diploma</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Assisting</td>
<td>Dental Assistant</td>
<td>$39,900</td>
</tr>
<tr>
<td>Medical Coding</td>
<td>Medical Secretary</td>
<td>$35,200</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>Phlebotomist</td>
<td>$30,300</td>
</tr>
<tr>
<td>Medical Transcription</td>
<td>Medical Transcriptionist</td>
<td>$34,700</td>
</tr>
<tr>
<td>Practical Nursing (LPN)</td>
<td>Nursing Home Nurse-LPN</td>
<td>$41,600</td>
</tr>
<tr>
<td>Pharmacy Technician</td>
<td>Pharmacy Technician</td>
<td>$31,100</td>
</tr>
<tr>
<td>Surgical Technology</td>
<td>Surgical Assistant</td>
<td>$41,300</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Certificates</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Transcription</td>
<td>Entry Level Medical Transcriptionist</td>
<td>$34,700</td>
</tr>
<tr>
<td>Nurse Aide</td>
<td>Certified Nurse Aide</td>
<td>$28,300</td>
</tr>
<tr>
<td>EMT</td>
<td>EMT</td>
<td>$34,500</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Career Academies</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medical Technician (EMT)</td>
<td>EMT</td>
<td>$34,500</td>
</tr>
<tr>
<td>Patient Care Academy</td>
<td>Certified Nurse Aide</td>
<td>$28,200</td>
</tr>
<tr>
<td>Pharmacy Technician Academy</td>
<td>Pharmacy Technician</td>
<td>$31,200</td>
</tr>
<tr>
<td>Pre-Professional Health Careers Academy</td>
<td>Physical Therapist Aide</td>
<td>$27,300</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018

**High School Courses**
- Physical Science
- Biology
- Chemistry
- Human Anatomy & Physiology
- Physics
- Psychology 1, 2, 3 or AP
- Sociology
- World Languages
- Culinary Arts 1, 2, & 3
- Advanced AP science classes also available

**High School Related Activities and Clubs**
- Internships
- Job Shadows
- Science Club
A career in hospitality and tourism requires certain skills and education depending on job requirements. Skills include management, marketing, and operations of restaurants and other culinary arts services, lodging, attractions, recreation events, and travel related services.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality Management</td>
<td>Executive Hotel Manager</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Property Manager</td>
</tr>
<tr>
<td>Event Management</td>
<td>Hospitality Professor</td>
</tr>
</tbody>
</table>

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culinary Arts</td>
<td>Chef</td>
</tr>
<tr>
<td>Hospitality Management</td>
<td>Lodging Manager</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baking &amp; Pastry Arts</td>
<td>Baker</td>
</tr>
<tr>
<td>Hospitality Management</td>
<td>Event Planner</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality Management Academy</td>
<td>Concierge</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
A career in human services requires certain skills and education depending on job requirements. Skills include preparing individuals that relate to family and human needs such as counseling and mental health services, family and community services, personal care, and consumer services.

<table>
<thead>
<tr>
<th>Bachelor's Degree from Iowa Universities and Colleges</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work</td>
<td>Social Worker</td>
<td>$61,300</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>Kindergarten Teacher</td>
<td>$51,100</td>
</tr>
<tr>
<td>Psychology</td>
<td>Therapist</td>
<td>$47,710</td>
</tr>
</tbody>
</table>

**Kirkwood Associate’s Degree**

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education</td>
<td>Preschool Teacher</td>
</tr>
<tr>
<td>Human Services</td>
<td>Substance Abuse Counselor</td>
</tr>
</tbody>
</table>

**Kirkwood Diploma**

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Education</td>
<td>Teacher Assistant</td>
</tr>
</tbody>
</table>

**Kirkwood Certificates**

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Paraeducator</td>
<td>Paraeducator</td>
</tr>
</tbody>
</table>

**Kirkwood Career Academies**

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Education Transfer</td>
<td>Teacher Assistant</td>
</tr>
<tr>
<td>Pre-Human Services Transfer (Social Work)</td>
<td>Patient Escort</td>
</tr>
<tr>
<td>Arts and Science Academy</td>
<td>Childcare Worker</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018

**High School Courses**

- Child Development 1 & 2
- Psychology 1, 2, 3 or AP
- Behavioral Health Studies
- Mentoring in Violence Prevention (MVP)
- Health
- Current and Critical Health Issues
- Sociology
- Ethnic Studies

**High School Related Activities and Clubs**

- Job Shadows
- Internships
- Teacher Assistant
Information Technology

A career in information technology requires certain skills and education depending on job requirements. Skills include building linkages in IT occupations for entry level, technical and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

### Bachelor’s Degree from Iowa Universities and Colleges

*Additional Bachelor’s Degrees include: Technology, Technology and Engineering Education, Technology Management, Business Analytics and Information Systems, Technical Communication*

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Developer</td>
<td>$88,000</td>
</tr>
<tr>
<td>Desktop Configuration Administrator</td>
<td>$59,700</td>
</tr>
<tr>
<td>Graphic Designer</td>
<td>$45,700</td>
</tr>
<tr>
<td>Desktop Publisher</td>
<td>$41,500</td>
</tr>
<tr>
<td>Network &amp; Computer Systems Administrator</td>
<td>$73,900</td>
</tr>
</tbody>
</table>

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Developer</td>
<td>$88,000</td>
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<tr>
<td>Desktop Configuration Administrator</td>
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<td>$73,900</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Store Technician</td>
<td>$50,900</td>
</tr>
<tr>
<td>Computer User Support Specialist</td>
<td>$47,000</td>
</tr>
</tbody>
</table>

### Kirkwood Certificates

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Operator</td>
<td>$44,100</td>
</tr>
<tr>
<td>JAVA Script Developer</td>
<td>$78,100</td>
</tr>
<tr>
<td>Web Application Developer</td>
<td>$74,800</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>$58,100</td>
</tr>
<tr>
<td>Document Management Specialist</td>
<td>$77,300</td>
</tr>
<tr>
<td>Website Developer</td>
<td>$58,000</td>
</tr>
<tr>
<td>Website Designer</td>
<td>$47,700</td>
</tr>
<tr>
<td>Security Management Specialist</td>
<td>$63,300</td>
</tr>
<tr>
<td>Computer Network Support Specialist</td>
<td>$54,000</td>
</tr>
<tr>
<td>User Experience Designer</td>
<td>$40,000</td>
</tr>
<tr>
<td>Information Clerk</td>
<td>$28,800</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Operator</td>
<td>$44,100</td>
</tr>
<tr>
<td>JAVA Script Developer</td>
<td>$78,100</td>
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<tr>
<td>Web Application Developer</td>
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<tr>
<td>Computer Programmer</td>
<td>$58,100</td>
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<tr>
<td>Document Management Specialist</td>
<td>$77,300</td>
</tr>
<tr>
<td>Website Developer</td>
<td>$58,000</td>
</tr>
<tr>
<td>Website Designer</td>
<td>$47,700</td>
</tr>
<tr>
<td>Security Management Specialist</td>
<td>$63,300</td>
</tr>
<tr>
<td>Computer Network Support Specialist</td>
<td>$54,000</td>
</tr>
<tr>
<td>User Experience Designer</td>
<td>$40,000</td>
</tr>
<tr>
<td>Information Clerk</td>
<td>$28,800</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
A career in law, public safety, corrections, and security requires certain skills and education depending on job requirements. Skills include planning, managing, and providing legal, public safety, protective services, and homeland security, including professional and technical support services.

<table>
<thead>
<tr>
<th>Advanced Degree</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juris Doctor, JD</td>
<td>Attorney/Lawyer</td>
<td>$108,650</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor’s Degree from Iowa Universities and Colleges</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health</td>
<td>Occupational Health and Safety Specialist</td>
<td>$69,950</td>
</tr>
<tr>
<td>Criminology</td>
<td>Forensic Scientist</td>
<td>$70,400</td>
</tr>
<tr>
<td>Linguistics</td>
<td>FBI Agent</td>
<td>$97,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Associate’s Degree</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal Justice</td>
<td>Police Patrol Officer</td>
<td>$56,600</td>
</tr>
<tr>
<td>Entry-Level Firefighter</td>
<td>Firefighter/Prevention Supervisor</td>
<td>$68,900</td>
</tr>
<tr>
<td>Paralegal Studies</td>
<td>Paralegal</td>
<td>$48,100</td>
</tr>
<tr>
<td>Paramedic</td>
<td>Paramedic</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Diploma</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry-Level Firefighter</td>
<td>Firefighter</td>
<td>$41,200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Certificates</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medical Technician</td>
<td>EMT</td>
<td>$26,100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Kirkwood Career Academies</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Criminal Justice Transfer</td>
<td>Security Guard</td>
<td>$27,650</td>
</tr>
<tr>
<td>Emergency Medical Technician Academy</td>
<td>EMT</td>
<td>$34,500</td>
</tr>
<tr>
<td>Arts and Sciences Academy</td>
<td>Police Dispatcher</td>
<td>$44,550</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
### Manufacturing

A career in manufacturing requires certain skills and education depending on job requirements. Skills include planning, managing, and performing the process of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering.

#### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineering</td>
<td>Aerospace Engineer</td>
<td>$112,550</td>
</tr>
<tr>
<td>Mechanical Engineering</td>
<td>Mechanical Engineer</td>
<td>$74,100</td>
</tr>
<tr>
<td>Manufacturing Technology</td>
<td>Industrial Production Manager</td>
<td>$96,150</td>
</tr>
</tbody>
</table>

#### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing and Robotics Techs</td>
<td>CNC Mill Operator</td>
<td>$37,700</td>
</tr>
<tr>
<td>Advanced Welding Techs</td>
<td>Pipefitter</td>
<td>$50,200</td>
</tr>
<tr>
<td>Automation and Instrumentation Techs</td>
<td>Electro-Mechanical Technician</td>
<td>$55,100</td>
</tr>
<tr>
<td>CNC Machining Techs</td>
<td>Tool and Die Maker</td>
<td>$48,200</td>
</tr>
<tr>
<td>Electronics Engineering Techs</td>
<td>Security System Technician</td>
<td>$46,300</td>
</tr>
<tr>
<td>CAD/Mechanical Engineering Techs</td>
<td>Mechanical Engineering Technician</td>
<td>$49,900</td>
</tr>
<tr>
<td>Energy Production and Distribution Techs</td>
<td>Wind Turbine Service Technician</td>
<td>$62,300</td>
</tr>
<tr>
<td>Industrial Maintenance</td>
<td>Electro-Mechanical Technician</td>
<td>$55,100</td>
</tr>
</tbody>
</table>

#### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry-Level Welding</td>
<td>Brazer</td>
<td>$37,900</td>
</tr>
<tr>
<td>CNC Machining Techs</td>
<td>Machinist</td>
<td>$39,000</td>
</tr>
<tr>
<td>Electronics Engineering Techs</td>
<td>Security System Technician</td>
<td>$46,300</td>
</tr>
<tr>
<td>CAD/Mechanical Engineering Techs</td>
<td>Test Technician</td>
<td>$40,800</td>
</tr>
<tr>
<td>HVAC Installer</td>
<td>Heating and Air Conditioning Mechanic</td>
<td>$50,500</td>
</tr>
<tr>
<td>Electromechanical Techs</td>
<td>Electromechanical Assembler</td>
<td>$39,500</td>
</tr>
<tr>
<td>Plumbing Pre-Apprenticeship</td>
<td>Plumber</td>
<td>$50,200*</td>
</tr>
</tbody>
</table>

#### Kirkwood Certificates

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Robotics Certificate</td>
<td>Computer Controlled Machine Operator</td>
<td>$38,300</td>
</tr>
</tbody>
</table>

#### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Program</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing with Robotics &amp; Welding</td>
<td>Fabricator</td>
<td>$32,300</td>
</tr>
<tr>
<td>Energy, Electrical, and Automation Academy</td>
<td>Vending Machine Service/Repairer</td>
<td>$31,650</td>
</tr>
</tbody>
</table>

---

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
Marketing

A career in marketing requires certain skills and education depending on job requirements. Skills such as anticipating, planning, managing, and performing marketing activities to reach organizational objectives such as advertising and promotion techniques, business communication, and business development.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing</td>
<td>Market Research Analyst</td>
<td>$58,600</td>
</tr>
<tr>
<td>Advertising and Digital Media</td>
<td>Public Relations Manager</td>
<td>$103,500</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>Marketing Coordinator</td>
<td>$59,700</td>
</tr>
</tbody>
</table>

*Additional Bachelor’s Degrees include: Global Marketing Sales, Management

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration: Marketing Management</td>
<td>Public Relations Specialist</td>
<td>$56,000</td>
</tr>
<tr>
<td>Apparel Merchandising</td>
<td>Apparel Merchandising</td>
<td>$60,400</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Assistant</td>
<td>Office Assistant</td>
<td>$34,000</td>
</tr>
</tbody>
</table>

### Kirkwood Certificates

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Marketing</td>
<td>Merchandise Display</td>
<td>$28,800</td>
</tr>
<tr>
<td>Sales</td>
<td>New Accounts Clerk</td>
<td>$37,200</td>
</tr>
<tr>
<td>Social Media Marketing</td>
<td>Media Technician</td>
<td>$34,400</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th></th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Business Administration</td>
<td>Retail Sales</td>
<td>$28,800</td>
</tr>
<tr>
<td>Graphic and Communication Technology</td>
<td>Promotional Assistant</td>
<td>$33,100</td>
</tr>
</tbody>
</table>

### High School Courses

- Marketing and Sales
- Entrepreneurship
- Accounting
- Personal Finance
- Intro to Business
- Public Speaking
- Psychology 1, 2, 3 or AP
- Web Design
- Futures
- Professional Pathways
- Graphic Design
- Advanced Graphic Design

### High School Related Activities and Clubs

- Internships
- Job Shadows
- Business Professionals of America
A career in science, technology, engineering, and mathematics requires certain skills and education depending on job requirements. Skills include providing, planning, and managing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

### Bachelor's Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Degree</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio Chemistry</td>
<td>Bio Chemist</td>
<td>$66,800</td>
</tr>
<tr>
<td>Actuarial Science</td>
<td>Actuary</td>
<td>$100,750</td>
</tr>
<tr>
<td>Seed Science</td>
<td>Seed Scientist</td>
<td>$76,700</td>
</tr>
</tbody>
</table>


### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Degree</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing &amp; Robotic Technologies</td>
<td>CNC Mill Operator</td>
<td>$37,700</td>
</tr>
<tr>
<td>CAD/Mechanical Engineering Technology</td>
<td>CAD Drafter</td>
<td>$54,900</td>
</tr>
<tr>
<td>Computer Software Development</td>
<td>Software Developer</td>
<td>$88,000</td>
</tr>
<tr>
<td>Computer Support Specialist</td>
<td>Desktop Configuration Administrator</td>
<td>$59,700</td>
</tr>
<tr>
<td>Energy Production &amp; Distribution</td>
<td>Wind Turbine Service Technician</td>
<td>$62,300</td>
</tr>
<tr>
<td>Exercise Science &amp; Wellness</td>
<td>Fitness Trainer</td>
<td>$32,800</td>
</tr>
<tr>
<td>Industrial Maintenance</td>
<td>Electro-Mechanical Technician</td>
<td>$55,100</td>
</tr>
<tr>
<td>Network &amp; System Administration</td>
<td>Network &amp; Computer Systems Administrator</td>
<td>$73,900</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Treatment Operator</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Degree</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC Technician</td>
<td>Computer Store Technician</td>
<td>$50,900</td>
</tr>
<tr>
<td>CAD/Mechanical Engineering Technology</td>
<td>Mechanical Engineering Technician</td>
<td>$49,900</td>
</tr>
<tr>
<td>Desktop Customer Service</td>
<td>Computer User Support Specialist</td>
<td>$47,000</td>
</tr>
<tr>
<td>Electromechanical Technology</td>
<td>Electromechanical Assembler</td>
<td>$39,500</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*
## Science, Technology, Engineering & Math

### Kirkwood Certificates
<table>
<thead>
<tr>
<th>Certificate</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Robotics</td>
<td>Computer Controlled Machine Operator</td>
<td>$38,300</td>
</tr>
<tr>
<td>Database Technologies</td>
<td>Computer Operator</td>
<td>$44,100</td>
</tr>
<tr>
<td>Java Programming</td>
<td>JAVA Script Developer</td>
<td>$78,100</td>
</tr>
<tr>
<td>Mobile App Development</td>
<td>Web Developer</td>
<td>$58,100</td>
</tr>
<tr>
<td>.NET Programming</td>
<td>Computer Programmer</td>
<td>$58,100</td>
</tr>
<tr>
<td>Healthcare IT Technician</td>
<td>Document Management Specialist</td>
<td>$77,300</td>
</tr>
<tr>
<td>Network Security</td>
<td>Security Management Specialist</td>
<td>$63,300</td>
</tr>
<tr>
<td>Network and System Administration</td>
<td>Computer Network Support Specialist</td>
<td>$54,000</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies
<table>
<thead>
<tr>
<th>Academy</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing with Robotics &amp; Welding</td>
<td>Fabricator</td>
<td>$32,300</td>
</tr>
<tr>
<td>ACE: Architectural and Engineering Design (Pre-Apprenticeship)</td>
<td>Design Assistant</td>
<td>$30,100</td>
</tr>
<tr>
<td>Computer Programming &amp; Web Development</td>
<td>User Experience Designer</td>
<td>$40,000</td>
</tr>
<tr>
<td>Engineering: Project Lead The Way</td>
<td>Sound Engineer</td>
<td>$48,200</td>
</tr>
<tr>
<td>Pre-Professional Health Careers</td>
<td>Physical Therapist Aide</td>
<td>$27,300</td>
</tr>
<tr>
<td>Water Environmental Technology</td>
<td>Water Operator</td>
<td>$24,950</td>
</tr>
</tbody>
</table>

*Information provided by Emsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018*

---

## High School Courses
- Algebra 1 & 2
- Geometry
- Pre-Calculus
- AP Calculus AB & BC
- AP Statistics
- PLTW Introduction to Engineering
- PLTW Principles of Engineering
- PLTW Digital Electronics
- PLTW Civil Engineering
- PLTW Aerospace Engineering
- AP Computer Science
- Earth and Space Science
- Biology & AP Biology
- Chemistry & AP Chemistry
- Physics & AP Physics
- Computer Business Applications
- Advanced Computer Business Apps
- Computer Programming Introduction to ACE
- Fundamentals of Electricity 1 & 2
- Web Design
- Graphic Design 1 & 2
- Architectural Plans and Specs
- Construction Skills
- Construction Technology Fundamentals of CAD
- AP Environmental Science

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## High School Related Activities and Clubs
- Internships
- Job Shadows
- Business Professionals of America
- Robotics
- Science Club
- Video Game Club
A career in transportation, distribution, and logistics requires certain skills and education depending on job requirements. Skills include planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional support services such as transportation infrastructure planning and management, logistic services, mobile equipment and facility maintenance.

### Bachelor’s Degree from Iowa Universities and Colleges

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>Insurance Appraiser</td>
<td>$60,600</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Transportation Manager</td>
<td>$83,000</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>Logistics Coordinator</td>
<td>$89,100</td>
</tr>
</tbody>
</table>

### Kirkwood Associate’s Degree

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Technology</td>
<td>Automotive Service Technician</td>
<td>$40,600</td>
</tr>
<tr>
<td>Diesel Ag Technology</td>
<td>Heavy Diesel Equipment Technician</td>
<td>$41,000</td>
</tr>
<tr>
<td>Diesel Truck Technology</td>
<td>Diesel Mechanic</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

### Kirkwood Diploma

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Collision Repair</td>
<td>Auto Body Technician</td>
<td>$41,100</td>
</tr>
</tbody>
</table>

### Kirkwood Career Academies

<table>
<thead>
<tr>
<th>Field</th>
<th>Sample Career</th>
<th>Salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Collision</td>
<td>Auto Glass Installer</td>
<td>$31,000</td>
</tr>
<tr>
<td>Automotive Technology</td>
<td>Automotive Service Attendant</td>
<td>$28,700</td>
</tr>
</tbody>
</table>

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