#### SPRINGVILLE HIGH SCHOOL COURSE GUIDE



2023 - 2024

Students, parents, employees and others doing business with or performing services for the Springville Community School District are hereby notified that this school district does not discriminate on the basis of race, color, national origin, gender, sexual orientation, gender identity, socioeconomic status, disability, religion, creed, age (except for permitting/prohibiting students to engage in certain activities), political party affiliation, marital status, or genetic information in admission or access to, or treatment in, its educational programs and activities, or its employment practices. Any person having inquiries concerning the school district's compliance federal and/or state non-discrimination laws is directed to contact the school district's compliance officer, Melissa Murphy, Secondary School Counselor at 400 Academy Street, Springville, Iowa 52336, or 319-854-6196 from 7:45 a.m. to 3:45 p.m., who has been designated by the school district to coordinate the school district's efforts to comply with federal and/or state non-discrimination laws.

The Springville Community School District offers career and technical education programs in the following service areas:

- Agriculture, Food, and Natural Resources
- Applied Science, Technology, Engineering, and Manufacturing
- Business, Finance, Marketing, and Management
- Health Science

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Career and Technical Education

- <u>Agriculture, Food, and Natural Resources</u>
- Applied Sciences, Technology, Engineering, and Manufacturing
- Business, Finance, Marketing, Management, and Information Solutions

<u>Health</u>

Independent/Off-site Options

Language Arts

**Mathematics** 

<u>Music</u>

**Physical Education** 

<u>Science</u>

Social Studies

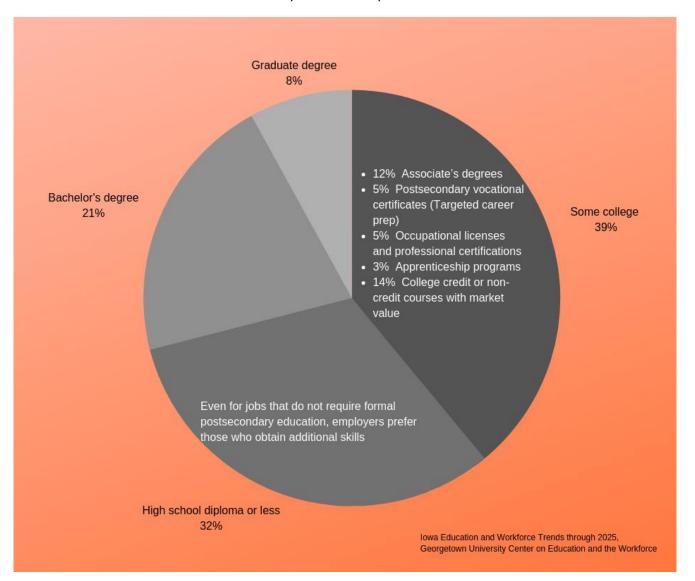
World Language

Appendix A: Definition of College and Career Readiness in Iowa

#### **Preparing for Postsecondary Success**

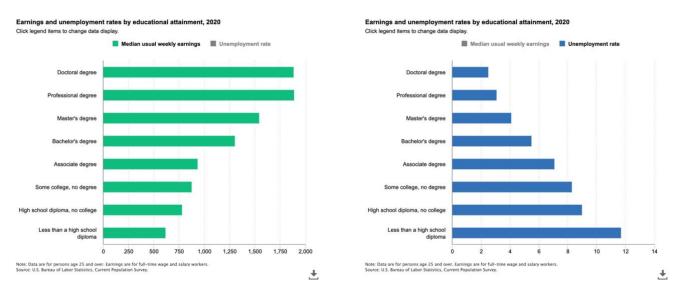
Springville Secondary faculty and staff strive to provide students an excellent foundation so they can grow into responsible, productive citizens who contribute to the community. We expect our students to have the knowledge, skills, and abilities to set and achieve meaningful and realistic goals, and the personal and interpersonal competence to achieve them. Springville Secondary's graduates will be ready for postsecondary success, possessing the content knowledge, self-understanding, and learning skills outlined in the lowa Department of Education's Definition of College and Career Readiness (Appendix A), and seeing high school graduation as but one stop on the route to lifelong success.

There are many routes to the education and training necessary to postsecondary success: service to the country via Americorp or the military, employer provided on-the-job training, apprenticeships, industry certifications, government licensure, certificate programs at vocational or technical schools, two-year colleges, four-year colleges and universities. As the infographic below indicates, by 2025, most jobs in Iowa will require some postsecondary education, but not a four-year degree:



Postsecondary education requirements--2025

No matter the route, postsecondary education and training leads to greater earning potential. The figures below show the difference in average earnings among those with various degrees of education:



In order to best position oneself for postsecondary education and training, students should take rigorous, demanding courses in the core areas of English, math, science, social studies, and foreign language. This is not to say that the fine arts should be ignored: Research demonstrates that students who participate in the fine arts have higher grade point averages, higher standardized test scores, and measurably higher levels of creativity and critical thinking skills.

To prepare for any of these postsecondary options, students should, in addition to meeting graduation requirements, consider the following:

- Many employers consider a foreign language important in today's world and offer additional pay to those who can communicate effectively in a second language. For this reason, Spanish is a recommended elective.
- Knowledge of computer technology is also important is today's technologically-driven workplace: Coursework in computers, such as Computer Business Applications, Computer Science Discoveries, and Computer Science Principles, is also recommended.

In addition to industry-specific knowledge, there are certain skills that employers require of employees that cross all job titles and pay scales:

Personal Skills			
Integrity Treating others with honesty, fairness and respect	<b>Professionalism</b> Maintaining a professional demeanor at work	Dependability & Reliability Displaying responsible behaviors at work	
Initiative Demonstrating a willingness to work and seek out new work challenges	Adaptability Displaying the capability to adapt to new, different or changing requirements		
	People Skills		
<b>Teamwork</b> Demonstrating the ability to work effectively with others	<b>Communication</b> Maintaining open lines of communication with others	<b>Respect</b> Working effectively with those who have diverse backgrounds	
Applied Knowledge			
<b>Reading</b> Understanding written sentences and paragraphs in work-related documents	Writing Using standard English to clearly communicate thoughts, ideas and information in written form	<b>Mathematic</b> s Using mathematics to solve problems	
<b>Science</b> Knowing and applying scientific principles and methods to solve problems	<b>Technology</b> Using information technology and related applications to convey and retrieve information	<b>Critical Thinking</b> Using logical thought processes to analyze and draw conclusions	
Workplace Skills			
<b>Planning &amp; Organizing</b> Planning and prioritizing work to manage time effectively and accomplish assigned tasks	ning and prioritizing work to Demonstrating the ability to apply critical thinking skills to solve age time effectively and problems by generating, evaluating, and implementing solutions		
<b>Decision Making</b> Applying critical thinking skills to solve problems encountered in the workplace	<b>Working with Tools &amp; Technology</b> Selecting, using and maintaining tools and technology to facilitate work activity		

National Network of Business and Industry Associations, 2014

#### **Course Selection By Career Pathway**

# Agriculture, Food & Natural Resources

- ► NATURAL RESOURCES SYSTEMS
- PLANT SYSTEMS
- POWER, STRUCTURAL
   & TECHNICAL SYSTEMS
   ARCHITECTURAL ARCHITECTURE & CONSTRUCTION
- ► AGRIBUSINESS SYSTEMS
  - ► ANIMAL SYSTEMS
  - ► ENVIRONMENTAL SERVICE SYSTEMS
  - ▶ FOOD PRODUCTS &
  - PROCESSING SYSTEMS

A career in agriculture, food, and natural resources requires certain skills and education depending on job r equirements. Skills include promotion, processing, marketing, distribution, finncing, and development of agricultural commodities including food, dibr , wood products, natural resources, horticulture, and other plant and animal products/resources.

Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Environmental Studies	Environmental Engineering	\$76,050
Food Science	Health and Food Inspector	\$74,500
Animal Science	Animal Scientist	\$76,970

\*Additional Bachelor's Degrees include: Agricultural and Life Sciences Education, Biology, Agricultural Biochemistry, Dairy Science, Agricultural Business, Environmental Science, Agricultural Engineering, Agricultural Sudies, Agricultural Systems Technology, Horticulture, Agricultural and Society, Landscape Architecture, Agronomy, Nutritional Science, Animal Ecology, Veterinary Medicine

Kirkwood Associate's Degree	Sample Career	Salaries
Agricultural Geospatial Technology	MappingTechnician	\$45,000
Agriculture Business	Crop Scouting	\$49,000
Agriculture Production Management	Agriculture Sales	\$33,000
Diesel Ag Technology	Heavy Diesel Equipment Technician	\$41,000
Diesel Truck Technology	Diesel Mechanic	\$40,000
Golf Course and Athletic Turfgrass Management	Grounds Manager	\$47,000
VeterinaryTechnology	Vet Tech	\$32,000
Humane Officr	Animal Control Officr	\$32,000
Landscape Construction and Design	Landscape Architect	\$54,900
Parks and Natural Resources	Gaming Officr	\$32,600
Water Environmental Technology	Water Treatment Operator	\$45,000



## X Agriculture, Food & Natural Resources

Kirkwood Diploma	Sample Career	Salaries
Agriculture Production	Seed Production	\$35,000
Pet Grooming	Pet Groomer	\$27,000
Golf Course and Athletic Turfgrass Management	Grounds Maintenance	\$37,500
Veterinary Assistant	Vet Assistant	\$24,000
Animal Control Assistant	Animal Care Assistant	\$24,500
Landscape Construction and Design	Landscape Worker	\$27,700
Water Environmental Technology	Environmental Technician	\$31,000
Water Treatment Specialist	Water Treatment Specialist	\$31,000
Wastewater Specialist	Wastewater Operator	\$39,000
Kirkwood Certificates	Sample Career	Salaries
Agricultural Geospatial Technology	Farm Machinery Operator	\$35,200
Small Scale Food Production	Farm Laborer	\$27,700
Kirkwood Career Academies	Sample Career	Salaries
Agriculture Sciences	Field Technician	\$26,400
Water Environmental Technology	Water Operator	\$24,950



### **High School Courses**

Plant Science

Workplace

English 9, 10, 11

Communication

Spanish I, II, III, IV

Oral Communication/

Biology Chemistry Introduction to Agriculture Science I, II Introduction to Animal Science I, II

Agribusiness Management \*Information provided by Ernsi National data and Kirkoeoad Community Callege Regional Tolent Forecast Data – Nov. 2018

High School Related Activities and Clubs Job Shadow

Internship Industry Tours FFA

## Architecture & Construction

► CONSTRUCTION

DESIGN/PRE-CONSTRUCTION

MAINTENANCE/OPERATIONS

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	Sample Career	Salaries
Architecture	Architect	\$83,750
Civil Engineering	Civil Engineer	\$81,850
Industrial Design	Electronic Engineer	\$69,800
Industrial Engineer	Industrial Engineer	\$78,950
Construction Management	Construction and Building Inspector	\$62,130

\*Additional Bachelor's Degrees include:Art & Design, Community & Regional Planning, Construction Engineering, Construction Management, Forestry, Graphic Design, Industrial Engineering, Industrial Technology, Intendisciplinary Design, Interior Design, Landscape Architecture, Materials Engineering

Kirkwood Associate's Degree	Sample Career	Salaries
Architecture Technology	Architectural Drafter	\$50,900
CAD/Mechanical Engineering Technology	CAD Drafter	\$54,900
Construction Management	First Line Supervisor	\$61,200
Interior Design	Interior Designer	\$40,000
Kirkwood Diploma	Sample Career	Salaries
CAD/Mechanical Engineering Technology	Mechanical Engineering Technician	\$49,900
Carpentry	Carpenter	\$42,900
HVAC Installer	HVAC Installer	\$50,500
Plumbing Pre-Apprenticeship	Plumber (If followed by an apprenticeship)	\$50,200
Kirkwood Certificates	Sample Career	Salaries
Construction Estimator	Estimator	\$35,000
Construction Supervision Certificate	Construction Coordinator	\$50,950
Kirkwood Career Academies	Sample Career	Salaries
ACE: Construction Trades (Pre-Apprenticeship)	Entry Level Construction Laborer	\$37,050
ACE: Architectural and Engineering Design (Pre-Apprenticeship)	Design Assistant	\$30,100









### **High School Courses**

Introduction to ACE Construction Materials Processing Construction Technology **Residential Construction** Geometry Physics

English 9, 10, 11 Oral Communication/ Workplace Communication Spanish I, II, III, IV

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

#### High School Related Activities and Clubs

Job Shadow Internship Industry Tours Apprenticeship Fair Build Iowa Career Fair

## Arts, A/V Technology & Communications

AVTECHNOLOGY & FILM

- JOURNALISM & BROADCASTING
- ▶ PERFORMING ARTS
- ▶ PRINTING TECHNOLOGY
- TELECOMMUNICATIONS
- ▶ VISUAL ARTS

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	Sample Career	Salaries
Broadcasting	News Anchor	\$50,850
English	Technical Writer	\$54,650
Theater	Theatre Actor	\$50,900
Kirkwood Associate's Degree	Sample Career	Salaries
Graphic Communication Technology	Graphic Designer	\$45,700
Interior Design	Interior Designer	\$40,000
Web Technologies	Desktop Publisher	\$41,500
Kirkwood Career Academies	Sample Career	Salaries
Arts and Sciences Academy	Camera Operator	\$32,450
Graphic Communication Technology Academy	Merchandise Displayer	\$28,800
Kirkwood Certificates	Sample Career	Salaries
Social Media Marketing	Media Technician	\$34,400
Web Development	Website Developer	\$58,000
Web Design	Website Designer	\$47,700





### **High School Courses**

Beginning and Advanced Drawing Beginning and Advanced Painting Beginning and Advanced Pottery Printmaking Glassworks Band Choir English 9, 10, 11 Writers'Workshop Oral Communication/Workplace Communication Introduction to ComputerTechnology Spanish I, II, III, IV \*Information provided by Ernsi National data and Kriewood Community College Regional Talent Forecast Data – Nov. 2018

#### High School Related Activities and Clubs

Yearbook Speech Drama Job Shadow Internship Industry Tours

## Business Management & Administration

- ▶ ADMINISTRATIVE SUPPORT
- ▶ BUSINESS INFORMATION MANAGEMENT
- ▶ GENERAL MANAGEMENT
- ▶ HUMAN RESOURCES MANAGEMENT
- OPERATIONS MANAGEMENT

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	Sample Career	Salaries
Master's Degree in Business Administration (MBA)	Executive Manager/CEO	\$179,500
Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Business	Operations Manager	\$96,750
Business Administration	Administrative Services Manager	\$88,600
Business Information Systems	Business Analytics & Info Systems	\$122,250
Business Management	Compensation & Benefits Manager	\$106,200
Human Resources	Human Resource Manager	\$102,950
*Additional Bachelor's Degrees include: Business Teaching Entrepreneu	ership, International Business	
Kirkwood Associate's Degree	Sample Career	Salaries
Business Administration: Accounting	Accounting Clerk	\$37,400
Business Administration: Financial Services	Credit Counselor	\$40,200
Business Administration: Management	Community Service Manager	\$58,300
Administrative Management	Executive Assistant	\$48,700
Health Information Technology	HIT Technician	\$40,500
Business Administration w/ Transfer Option		
Kirkwood Diploma	Sample Career	Salaries
Office Assistant	Office Clerk	\$34,300
Medical Coding	Medical Secretary	\$35,200
Medical Transcription	Medical Transcriptionist	\$34,700
Kirkwood Certificates	Sample Career	Salaries
Technical Accounting	Bookkeeper	\$37,400
Global Perspectives in Business	Shipping, Receiving, and Traffic Clerks	\$34,600
Entrepreneurship	Business Continuity Planner	\$63,000
Human Resources	HR Assistant	\$39,200
Project Management	Project Manager	\$51,100
Medical Transcription	Medical Transcriptionist	\$28,900
Kirkwood Career Academies	Sample Career	Salaries
Pre-Business Administration	Receptionist	\$28,400
Arts and Sciences	Mail Clerk	\$29,100



### **High School Courses**

**Opringville** 

Introduction to Business Computer Business Applications Personal Finance Psychology Social Issues in Popular Culture Government Oral Communication/ Workplace Communication English 9, 10, 11 College English Spanish I, II, III, IV

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

> High School Related Activities and Clubs Job Shadow Internship Industry Tours

## **Education and Training**

▶ ADMINISTRATION & ADMINISTRATIVE SUPPORT

PROFESSIONAL SUPPORT SERVICES

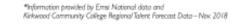
▶ TEACHING/TRAINING

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	Sample Career	Salaries
Elementary Education	Elementary Special Education Teacher	\$56,350
Secondary Education	High School Teacher	\$54,450
Organizational Leadership	Training Manager	\$87,250
*Additional Bachelor's Degrees include: Athletic Training		
Kirkwood Associate's Degree	Sample Career	Salaries
Early Childhood Education	Childcare Administrator	\$41,600
Exercise Science and Wellness	Fitness Trainer	\$32,800
Liberal Arts – Education w/ Transfer Option		
Kirkwood Diploma	Sample Career	Salaries
Early Childhood Education	Preschool Teacher	\$25,800
Kirkwood Career Academies	Sample Career	Salaries
Pre-Education Transfer	Teacher Assistant	\$24,400
Arts and Science Academy	Childcare Worker	\$20,500
Kirkwood Certificates	Sample Career	Salaries
Early Childhood Paraeducator	Paraeducator	\$24,900









## **High School Courses**

English 9, 10, 11 College English Oral Communication/ Workplace Communication Algebra II Psychology

Student Tutor Program Introduction to Computer Technology World Geography & Current Affairs Spanish I, II, III, IV

## 🚔 Finance

- ♦ ACCOUNTING
- BANKING SERVICES
- BUSINESS FINANCE
- ► INSURANCE
- ▶ SECURITIES & INVESTMENTS

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	Sample Career	Salaries
Accounting	Accountant	\$66,500
Finance	Financial Analyst	\$78,450
Financial Counseling and Planning	Loan Officer	\$69,100
Kirkwood Associate's Degree	Sample Career	Salaries
Business Administration: Accounting	Accounting Clerk	\$37,000
Business Administration: Financial Services	Financial Clerk	\$40,000
Kirkwood Certificates	Sample Career	Salaries
Technical Accounting	Bookkeeper	\$35,000
Kirkwood Career Academies	Sample Career	Salaries
Pre-Business Administration	Bank Teller	\$27,050
Arts and Sciences	Cashier	\$24,850





### **High School Courses**

Introduction to Business Introduction to Computer Technology Economics Personal Finance Spanish I, II, III, IV English 9, 10, 11

Oral Communication/ Workplace Communication Agribusiness Management

\*Information provided by Ernsi National data and Kirkwood Cammunity College Regional Talent Forecast Data – Nox 20/8

## Government & Public Administration

FOREIGN SERVICE

- F GOVERNANCE
- ▶ NATIONAL SECURITY
- ▶ PLANNING
- PUBLIC MANAGEMENT & ADMINISTRATION
- ▶ REGULATION
- ▶ REVENUE & TAXATION

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

Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Urban Planning	Urban and Regional Planners	\$64,980
Public Administration	Assessor	\$79,050
Accounting	Auditor	\$66,500
Kirkwood Associate's Degree	Sample Career	Salaries
Business Administration	City Clerk	\$43,000
Business Administration: Management	Chamber of Commerce Chair	\$50,000
Administrative Management	Executive Assistant	\$45,500
Water Environmental Technology	Water Treatment Operator	\$45,000
Kirkwood Diploma	Sample Career	Salaries
Office Assistant	Office Assistant	\$34,000
Kirkwood Career Academies	Sample Career	Salaries
Pre-Business Administration	Receptionist	\$28,400
Arts and Sciences	Mail Clerk	\$29,100
Water Environmental Technology	Water Operator	\$24,950

## **FUTURE** Kirkwood



Minformation provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data – Nov. 2018



### **High School Courses**

Government Economics US History Social Issues in Popular Culture World Geography & Current Affairs Service Learning English 9, 10, 11 College English Oral Communication/Workplace Communication Spanish I, II, III, IV High School Related Activities and Clubs lob Shadow

Internship Student Government

## Health Sciences

- ▶ BIOTECHNOLOGY RESEARCH & DEVELOPMENT
- ► DIAGNOSTIC SERVICES
- ► HEALTH INFORMATICS
- SUPPORT SERVICES
- ▶ THERAPEUTIC SERVICES

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	Sample Career	Salaries
Masters degree in Nursing	Nurse Practitioner	\$104,150
Masters degree in Health Science	Physician Assistant	\$110,150
Doctor of Medicine	Family and General Practice Medical Doctor	\$241,070
Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Biology	Nurse (with BSD degree)	\$70,650
Dietetics	Dietitian	\$50,500
Healthcare Administration	Healthcare Administrator	\$91,700
Nursing	Nurse (with BSN degree)	\$70,650

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

Kirkwood Associate's Degree	Sample Career	Salaries
Dental Assisting	Dental Assistant	\$39,900
Dental Hygiene	Dental Hygienist	\$68,700
Dental Technology	Dental LaboratoryTech	\$41,500
Diagnostic Assistant (Radiologic Technology)	Radiologic Technologist	\$51,700
Bectroneurodiagnostic Technology	Neurodiagnostic Technologist	\$41,300
Exercise Science & Wellness	FitnessTrainer	\$32,800
Health Information Technology	Health Information Technician	\$40,500
Medical Assisting	Medical Assistant	\$34,000
Medical Laboratory Technology	Clinical Lab Technician	\$48,400
Associate Degree Nursing, RN	Critical Care Nurse	\$57,900
Occupational Therapy Assistant	OTA	\$57,400
Paramedic	Paramedic	\$40,000
Physical Therapy Assistant	PTA	\$47,500
RespiratoryTherapist	RespiratoryTherapist	\$52,800
Surgical Technology	Surgical Technologist	\$41,700



le \*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov/2018

## Health Sciences

Kirkwood Diploma	Sample Career	Salaries
Dental Assisting	Dental Assistant	\$39,900
Medical Coding	Medical Secretary	\$35,200
Medical Assisting	Phlebotomist	\$30,300
Medical Transcription	Medical Transcriptionist	\$34,700
Practical Nursing (LPN)	Nursing Home Nurse-LPN	\$41,600
Pharmacy Technician	Pharmacy Technician	\$31,100
Surgical Technology	Surgical Assistant	\$41,300
Kirkwood Certificates	Sample Career	Salaries
Medical Transcription	Entry Level Medical Transcriptionist	\$34,700
Nurse Aide	Certified Nurse Aide	\$28,300
EMT	EMT	\$34,500
Kirkwood Career Academies	Sample Career	Salaries
Emergency Medical Technician (EMT)	EMT	\$34,500
Patient Care Academy	Certified Nurse Aide	\$28,200
Pharmacy Technician Academy	Pharmacy Technician	\$31,200
Pre-Professional Health Careers Academy	Physical Therapist Aide	\$27,300

FUTURE Kirkwood





### **High School Courses**

Biology Chemistry Anatomy Psychology Health English 9, 10, 11 Oral Communication/Workplace Communication Spanish I, II, III, IV \*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov. 2018

## Hospitality & Tourism

▶ LODGING

- ▶ RECREATION, AMUSEMENTS & ATTRACTIONS
- ▶ RESTAURANTS & CULINARY ARTS SERVICES
- TRAVEL & TOURISM

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	Sample Career	Salaries
Hospitality Management	Executive Hotel Manager	\$97,450
Business Administration	Property Manager	\$67,000
Event Management	Hospitality Professor	\$110,400
Kirkwood Associate's Degree	Sample Career	Salaries
Culinary Arts	Chef	\$38,100
Hospitality Management	Lodging Manager	\$44,000
Kirkwood Diploma	Sample Career	Salaries
Baking & Pastry Arts	Baker	\$25,600
Hospitality Management	Event Planner	\$43,700
Kirkwood Career Academies	Sample Career	Salaries
Hospitality Management Academy	Concierge	\$25,450







### **High School Courses**

Introduction to Business Computer Business Applications Introduction to Computer Technology Writers' Workshop Biology Chemistry Spanish I, II, III, IV English 9, 10, 11 Oral Communication/ Workplace

Communication Psychology World Geography & Current Affairs

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

## Human Services

CONSUMER SERVICES

COUNSELING & MENTAL HEALTH SERVICES

EARLY CHILDHOOD DEVELOPMENT & SERVICES

- FAMILY & COMMUNITY SERVICES
- PERSONAL CARE SERVICES

A career in human services requires certain skills and education depending on job requirements. Skills include preparing individuals that relates to family and human needs such an counseling and mental health services, family and community services, personal care, and consumer services.

Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Social Work	Social Worker	\$61,300
Elementary Education	Kindergarten Teacher	\$51,100
Psychology	Therapist	\$47,710
Kirkwood Associate's Degree	Sample Career	Salaries
Early Childhood Education	Preschool Teacher	\$25,800
Human Services	Substance Abuse Counselor	\$44,200
Kirkwood Diploma	Sample Career	Salaries
Early Childhood Education	Teacher Assistant	\$24,400
Kirkwood Certificates	Sample Career	Salaries
Early Childhood Paraeducator	Paraeducator	\$24,900
Kirkwood Career Academies	Sample Career	Salaries
Pre-Education Transfer	Teacher Assistant	\$24,400
Pre-Human Services Transfer (Social Work)	Patient Escort	\$28,900
Arts and Science Academy	Childcare Worker	\$20,500







## **High School Courses**

Psychology Social Issues in Popular Culture World Geography & Current Affairs English 9, 10, 11 College English Oral Communication/Workplace Communication Spanish I, II, III, IV Service Learning

\*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data - Nov. 2018

## Information Technology

INFORMATION SUPPORT & SERVICES

- NETWORK SYSTEMS
- PROGRAMMING & SOFTWARE DEVELOPMENT
- WEB & DIGITAL COMMUNICATIONS

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	Sample Career	Salaries
*Additional Bachelor's Degrees include: Technology, Technology and Engineering Education, Technology Management, Business		Business

Analytics and Information Systems, Technical Communication

Kirkwood Associate's Degree	Sample Career	Salaries
Computer Software Development	Software Developer	\$88,000
Computer Support Specialist	Desktop Configuration Administrator	\$59,700
Graphic Communication Technology	Graphic Designer	\$45,700
Web Technologies	Desktop Publisher	\$41,500
Network and System Administration	Network & Computer Systems Administrator	\$73,900
Kirkwood Diploma	Sample Career	Salaries
PC Technician	Computer Store Technician	\$50,900
Desktop Customer Service	Computer User Support Specialist	\$47,000
Kirkwood Certificates	Sample Career	Salaries
Database Technologies	Computer Operator	\$44,100
Java Programming	JAVA Script Developer	\$78,100
Mobile App Development	Web Application Developer	\$74,800
.NET Programming	Computer Programmer	\$58,100
Healthcare IT Technician	Document Management Specialist	\$77,300
Web Development	Website Developer	\$58,000
Web Design	Website Designer	\$47,700
Network Security	Security Management Specialist	\$63,300
Network and System Administration	Computer Network Support Specialist	\$54,000
Kirkwood Career Academies	Sample Career	Salarie
Computer Software Development (Coding)	User Experience Designer	\$40,000
Network Security	Information Clerk	\$28,800









### **High School Courses**

Computer Business Applications Introduction to Computer Technology Algebra I, II Geometry

Pre-Calculus Calculus English 9, 10, 11 Oral Communication/ Workplace Communication Spanish I, II, III, IV

\*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov. 2018

## Law, Public Safety, Corrections & Security

CORRECTION SERVICES

- EMERGENCY & FIRE MANAGEMENT SERVICES
- LAW ENFORCEMENT SERVICES
- LEGAL SERVICES
- ▶ SECURITY & PROTECTIVE SERVICES

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.

Advanced Degree	Sample Career	Salaries
Juris Doctor, JD	Attorney/Lawyer	\$108,650
Bachelor's Degree from Iowa Universities and Colleges	Sample Career	Salaries
Public Health	Occupational Health and Safety Specialist	\$69,950
Criminology	Forensic Scientist	\$70,400
Linguistics	FBI Agent	\$97,000
Kirkwood Associate's Degree	Sample Career	Salaries
Criminal Justice	Police Patrol Officer	\$56,600
Entry-Level Firefighter	Firefighter/Prevention Supervisor	\$68,900
Paralegal Studies	Paralegal	\$48,100
Paramedic	Paramedic	\$40,000
Kirkwood Diploma	Sample Career	Salaries
Entry-Level Firefighter	Firefighter	\$41,200
Kirkwood Certificates	Sample Career	Salaries
Entry-Level Firefighter	Emergency Vehicle Operator	\$26,100
Emergency Medical Technician	EMT	\$26,100
Kirkwood Career Academies	Sample Career	Salaries
Pre-Criminal Justice Transfer	Security Guard	\$27,650
Emergency Medical Technician Academy	EMT	\$34,500
Arts and Sciences Academy	Police Dispatcher	\$44,550





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



### **High School Courses**

Computer Business Applications Introduction to Computer Technology Government Psychology Social Issues in Popular Culture World Geography & Current Affairs English 9, 10, 11 College English Oral Communication/ Workplace Communication Spanish I, II, III, IV

## 😂 Manufacturing

▶ HEALTH, SAFETY &

- ENVIRONMENTAL ASSURANCE
- LOGISTICS & INVENTORY CONTROL
- MAINTENANCE, INSTALLATION & REPAIR → QUALITY ASSURANCE
- MANUFACTURING PRODUCTION PROCESS DEV.
- PRODUCTION

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	Sample Career	Salaries
Aerospace Engineering	Aerospace Engineer	\$112,550
Mechanical Engineering	Mechanical Engineer	\$74,100
Manufacturing Technology	Industrial Production Manager	\$96,150
Kirkwood Associate's Degree	Sample Career	Salaries
Advanced Manufacturing and Robotics Technologies	CNC Mill Operator	\$37,700
Advanced Welding Technologies	Pipefitter	\$50,200
Automation and Instrumentation Technologies	Electro-Mechanical Technician	\$55,100
CNC Machining Technology	Tool and Die Maker	\$48,200
Electronics Engineering Technology	Security System Technician	\$46,300
CAD/Mechanical Engineering Technology	Mechanical Engineering Technician	\$49,900
Energy Production and Distribution Technologies	Wind Turbine Service Technician	\$62,300
Industrial Maintenance	Electro-Mechanical Technician	\$55,100
Kirkwood Diploma	Sample Career	Salaries
Entry-Level Welding	Brazer	\$37,900
CNC Machining Technology	Machinist	\$39,000
Electronics Engineering Technology	Security System Technician	\$46,300
CAD/Mechanical Engineering Technology	Test Technician	\$40,800
HVAC Installer	Heating and Air Conditioning Mechanic	\$50,500
Electromechanical Technology	Electromechanical Assembler	\$39,500
Plumbing Pre-Apprenticeship	Plumber	\$50,200*
Kirkwood Certificates	Sample Career	Salaries
Industrial Robotics Certificate	Computer Controlled Machine Operator	\$38,300
Kirkwood Career Academies	Sample Career	Salaries
Advanced Manufacturing with Robotics & Welding	Fabricator	\$32,300
Energy, Electrical, and Automation Academy	Vending Machine Service/Repairer	\$31,650





FUTURE Kirkwood Springville DISTRICT

\*Information provided by Ernsi National data and Kirlowood Community College Regional Talent, Forecast Data – Nov. 2018



#### **High School Courses**

Introduction to ACE Engineering Concepts Constructions Materials Processing Construction Technology Algebra I, II

Geometry English 9, 10, 11 Oral Communication/Workplace Communication Spanish I, II, III, IV

**High School Related** Activities and Clubs

Job Shadow Internship Industry Tours

MARKETING COMMUNICATIONS

- MARKETING MANAGEMENT
- MARKETING RESEARCH
- MERCHANDISING
- PROFESSIONAL SALES

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	Sample Career	Salaries
Marketing	Market Research Analyst	\$58,600
Advertising and Digital Media	Public Relations Manager	\$103,500
Communication Studies	Marketing Coordinator	\$59,700
*Additional Bachelor's Degrees include: Global Marketing	g Sales, Management	
Kirkwood Associate's Degree	Sample Career	Salaries
Business Administration: Marketing Management	Public Relations Specialist	\$56,000
Apparel Merchandising	Apparel Merchandising	\$60,400
Kirkwood Diploma	Sample Career	Salaries
Office Assistant	Office Assistant	\$34,000
Kirkwood Certificates	Sample Career	Salaries
Retail Marketing	Merchandise Displayer	\$28,800
Sales	New Accounts Clerk	\$37,200
Social Media Marketing	Media Technician	\$34,400
Kirkwood Career Academies	Sample Career	Salaries
Pre-Business Administration	Retail Sales	\$28,800

FUTURE Kirkwood

Marketing





## High School Courses

Introduction to Business Computer Business Applications Intro to Computer Technology English 9, 10, 11 Writers' Workshop College English Oral Communication/Workplace Communication Spanish I, II, III, IV

\*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov. 2018

# Science, Technology, Engineering & Math

Engineering & Technology
Science & Mathematics

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	Sample Career	Salaries
Bio Chemistry	Bio Chemist	\$66,800
Actuarial Science	Actuary	\$100,750
Seed Science	Seed Scientist	\$76,700

\* Additional Bachelor's Degrees include: Ag Engineering, Electrical Engineering, Microbiology, Physics, Geo Stience, Ag and Life Stiences Education, Environmental Stience, Nutritional Stience, Bio Chemistry, Technology and Engineering Education, Animal Stience, Family and Consumer Stience Education, Physics, Communication Stiences and Disorder, Technology Management, Biological Systems Engineering, Food Stience, Political Stience, Computer Stience, Technology, Chemical Engineering, Industrial Engineering, Sed Stience, Earth Stience, Applied Physics, Ovil Engineering, Industrial Technology, Software Engineering, Graphic Technology, Bio Medical Engineering, Computer Engineering, Management and Information Systems, Satistics, Military Stience, Business Analytics and Information Systems, Construction Engineering, Materials Engineering, Technical Communication, Movement and Exercise Science, Mortuary Science, Oulinary Food Science, Mathematics, Biology, Science Education, Nuclear Medicine Technology, Dairy Science, Mechanical Engineering, Chemistry, Social Science, Radiation Sciences

Kirkwood Associate's Degree	Sample Career	Salaries
Advanced Manufacturing & Robotic Technologies	CNC Mill Operator	\$37,700
CAD/Mechanical EngineeringTechnology	CAD Drafter	\$54,900
Computer Software Development	Software Developer	\$88,000
Computer Support Specialist	Desktop Configr ation Administrator	\$59,700
Energy Production & Distribution	Wind Turbine Service Technician	\$62,300
Exercise Science & Wellness	FitnessTrainer	\$32,800
Industrial Maintenance	Bectro-Mechanical Technician	\$55,100
Network & System Administration	Network & Computer Systems Administrator	\$73,900
Water Environmental Technology	Water Treatment Operator	\$45,000
Kirkwood Diploma	Sample Career	Salaries
PC Technician	Computer Store Technician	\$50,900
CAD/Mechanical EngineeringTechnology	Mechanical EngineeringTechnician	\$49,900
Desktop Customer Service	Computer User Support Specialist	\$47,000
Bectromechanical Technology	Electromechanical Assembler	\$39,500



\*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov.2018

## 🗱 Science, Technology, Engineering & Math

Kirkwood Certificates	Sample Career	Salaries
Industrial Robotics	Computer Controlled Machine Operator	\$38,300
Database Technologies	Computer Operator	\$44,100
Java Programming	JAVA Script Developer	\$78,100
Mobile App Development	Web Developer	\$58,100
.NET Programming	Computer Programmer	\$58,100
Healthcare IT Technician	Document Management Specialist	\$77,300
Network Security	Security Management Specialist	\$63,300
Network and System Administration	Computer Network Support Specialist	\$54,000
Kirkwood Career Academies	Sample Career	Salaries
Advanced Manufacturing with Robotics & Welding	Fabricator	\$32,300
ACE: Architectural and Engineering Design (Pre-Apprenticeship)	Design Assistant	\$30,100
Computer Programming & Web Development	User Experience Designer	\$40,000
Engineering: Project Lead The Way	Sound Engineer	\$48,200
Pre-Professional Health Careers	Physical Therapist Aide	\$27,300
Water Environmental Technology	Water Operator	\$24,950

FUTURE Kirkwood



High School Courses

Engineering Concepts Biology Chemistry Physics Algebra I, II Geometry Pre-Calculus Calculus English 9, 10, 11 Oral Communication/ Workplace Communication Spanish I, II, III, IV

\*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data – Nox 2018



- FACILITY & MOBILE EQUIPMENT MAINTENANCE
- HEALTH, SAFETY & ENVIRONMENTAL MANAGEMENT
- LOGISTICS PLANNING & MANAGEMENT SERVICES
- SALES & SERVICE
- TRANSPORTATION OPERATIONS
- TRANSPORTATION SYSTEMS/INFRASTRUCTURE PLANNING,
- MANAGEMENT & REGULATION
- WAREHOUSING & DISTRIBUTION CENTER OPERATIONS

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	Sample Career	Salaries
Finance	Insurance Appraiser	\$60,600
Business Administration	Transportation Manager	\$83,000
Supply Chain Management	Logistics Coordinator	\$89,100
Kirkwood Associate's Degree	Sample Career	Salaries
Automotive Technology	Automotive Service Technician	\$40,600
Diesel Ag Technology	Heavy Diesel Equipment Technician	\$41,000
Diesel Truck Technology	Diesel Mechanic	\$40,000
Kirkwood Diploma	Sample Career	Salaries
Automotive Collision Repair	Auto Body Technician	\$41,100
Kirkwood Career Academies	Sample Career	Salaries
Automotive Collision	Auto Glass Installer	\$31,000
Automotive Technology	Automotive Service Attendant	\$28,700

FUTURE Kirkwood Springville





### High School Courses

Computer Business Applications English 9, 10, 11 Writers' Workshop Oral Communication/ Workplace Communication Geometry

Algebra II Chemistry Physics Spanish I, II, III, IV \*Information provided by Ernsi National data and Kirkwood Community College Regional Talent Forecast Data—Nov. 2018

#### Springville High School Graduation Requirements

Total credits required for graduation: 54 credits

English	
English 9	2 credits
English 10	2 credits
English 11 or equivalent	2 credits
Speech	1 credit
English elective	1 credit
English Total	8 credits

Social Studies	
World History	2 credits
U.S. History	2 credits
Government	1 credit
Economics*	1 credit
Social Studies Total 6 credits	
*This course fulfills the financial literacy requirement	

Mathematics*	
Algebra I	2 credits
Geometry	2 credits
Algebra II	2 credits
Pre-calculus	2 credits
Calculus	2 credits
Consumer Math	1 credit
Technical Math	1 credit
Probability & Statistics	1 credit
Mathematics Total 6 credits	
*Initial placement made in consultation with math teacher	

Science*	
General Science	2 credits
Biology	2 credits
Chemistry	2 credits
Physics	2 credits
Anatomy	2 credits
Astronomy	1 credit
Forensic Science	1 credit
Science Total	6 credits
*Students who begin their high school careers with biology must commit to biology, chemistry, and physics in order to meet Iowa Core requirements.	

Physical Education*	
Physical Education	.5 credit per term
Physical Education Total	4 credits
*Information on PE waivers can be found on page 27	

Health	
Health & Fitness	1 credit
Health & Life Management	1 credit
Health Total	1 credit

Electives	
Electives Total	23 credits

All courses listed are Springville-offered courses; equivalent courses, determined by administration, may be substituted.

Meeting graduation requirements does not ensure admittance to postsecondary institutions. Students should ensure they meet the admissions requirements of their chosen postsecondary institutions by meeting with admissions representatives from institutions of interest. The <u>Regent Admissions Index</u> determines admission to Iowa State University, The University of Iowa, and University of Northern Iowa. Those who wish to participate in college athletics must meet requirements set by the <u>NCAA</u>, <u>NAIA</u>, or <u>NJCAA</u>.

#### **General Information**

- 1. Ninth through twelfth grade students must be registered for a minimum of seven and one-half credits (7 classes + PE) each semester.
- 2. Physical Education Policy--Waivers

Students in grades nine through twelve are required to participate in physical education courses unless they are excused by the principal.

Students may be excused from physical education courses if the student presents a written statement from a doctor stating that such activities could be injurious to the health of the student or the student has been exempted because of a conflict with the student's religious beliefs, provided such excuse fits within federal and state laws. Caregivers of students requesting such exemption should file a written request that shall include the basis for the request (e.g., verified health concerns and/or a religious conflict) and a proposed alternative activity or study acceptable to the superintendent. However, the superintendent and/or designee shall have the final authority to determine the alternate activity or study.

In order to receive a physical education exemption due to an athletic program at Springville Community Schools, students must be fully involved in an athletic program during the semester in which the exemption is sought.

Students in grade 12 may be excused from physical education courses if

- the student is enrolled in a cooperative, work-study, or other educational program authorized by the school which requires the student's absence from the school premises during the school day,
- the student is enrolled in academic courses not otherwise available, or
- the student is enrolled in an organized and supervised athletic program sponsored by the school which requires at least as much time of participation as 900 minutes of physical education.

Students in grades 9-11 may be excused from physical education courses if

- the student is enrolled in academic courses not otherwise available, or
- the student is enrolled in an organized and supervised athletic program sponsored by the school which requires at least as much time of participation as 900 minutes of physical education.

Students who will not participate in physical education must complete a physical education waiver request each semester for which they seek an exemption: <u>PE Waiver Form</u>.

- 3. Semester grades earned in vocal music, instrumental music, and physical education will be figured into computation of class rank and grade point average. The credits received in these courses will count toward graduation and will be computed in total credit standings.
- 4. Semester courses may be added and dropped only during the first TWO days of a new semester. Year-long courses may be added and dropped only during the first TWO days of the start of the school year. While Kirkwood has its own deadlines, Springville students must adhere to Springville drop deadlines, not Kirkwood's, due to the difficulty of adding classes weeks into the school year. Students may drop a course with the permission of the teacher, caregiver, and administrator or designee. If a student drops a course after the first two days, the student will earn a failing grade for the course. Likewise, students who drop or withdraw from Kirkwood Academy courses will earn an F on their high school transcript. Add/Drop Slips can be obtained from the school counselor.
- 5. Students taking a full-year course are to be enrolled both semesters and cannot drop the course after the first semester. Should a student fail the first semester, the course can be dropped upon the recommendation of the teacher and the approval of the caregiver, and the administrator. The student must then enroll in a one-credit course for the second semester. Kirkwood Academies are a full-year commitment.
- 6. Students may not sign up for one semester of a full-year course unless they are repeating due to failure.

Not all artists are starving—there are great careers in art. If art is your passion, consider a career as an art critic, an art historian, museum curator, museum administrator, restorer, sculptor, printmaker, photographer, graphic designer, illustrator, exhibition designer, cartoonist, web designer, fine arts appraiser, gallery director, museum educator, interior designer, fashion designer, architect, art dealer, or greeting card designer. There are hundreds of ways to make a living with a background in art.

#### **Beginning Drawing**

#### Grades 9-12

#### 1 Credit

This one semester course is a beginning studio course that covers the basic language, materials, and processes of two-dimensional art. Students will learn design elements and principles to create pieces of art. Students will learn basic drawing techniques, such as perspective, proportions, shading and contouring while exploring life drawing and landscape drawing, as well as choice projects. Students will use various materials, including charcoal, pencil, pastel, and colored pencil.

#### Advanced Drawing

Prerequisite: Beginning Drawing

Grades 9-12

1 Credit

Students will continue developing their own personal artistic style and learn more advanced and contemporary artistic techniques in this one semester studio course. Students will explore the work of famous artists, as well as some elements of graphic design. Students will be encouraged to create individual projects to develop their portfolio and have the opportunity to create independent projects on a larger scale than Beginning Drawing.

#### **Beginning Painting**

Prerequisite: Beginning Drawing preferred Grades 9-12

1 Credit

Students in this one semester course will learn basic color theory using several different painting media. As students progress and advance, they will be encouraged to develop their own artistic styles with more choice projects. Students will study famous paintings and artists to help inspire and develop their individual aesthetic.

#### **Advanced Painting**

Prerequisite: Beginning Painting

- Grades 9-12
- 1 Credit

In this one semester course, students will continue developing their own personal artistic style using watercolor, tempera, oils, and acrylics, and further develop their understanding of major artists, art movements, and styles.

#### **Beginning Pottery**

Grades 9-12

#### 1 Credit

This one semester course offers a comprehensive beginning studio course that focuses on creating threedimensional works and covers the basic language of art elements and principles. Student projects will focus on ceramics and clay techniques; various methods of techniques to create and finish functional and non-functional pieces of ceramic art will be emphasized. Students will learn characteristics of clay as a raw material, the transformation under heat and the various firing and glazing techniques. Students will study famous pieces of 3D artwork and artists. Beginning Pottery does not cover wheel throwing.

#### **Advanced Pottery**

Prerequisite: Beginning Pottery Grades 9-12 1 Credit

Advanced Pottery is a one semester course in which students will develop an individual aesthetic. Students will learn how to throw on the wheel, as well as continue to develop hand building techniques. Students need the basic skills of Beginning Pottery in order to create high quality works of art on the wheel.

#### **Exploring Glassworks**

Prerequisite: Successful completion of a high school art course or instructor approval Grades 9-12

1 Credit

This one semester course is an overview of various glass construction processes. Students will learn about the science of glass as well as the history of glass artworks. Students will spend the semester learning about various glass construction methods including mosaics and glass fusing. Students will create mosaics, jewelry, and other small scale glass pieces, while paying close attention to planning and design.

#### Printmaking

Grades 9-12

#### 1 Credit

This one semester printmaking course will provide students with experience in a variety of traditional, nontraditional and digital printmaking media, techniques, and processes. These courses emphasize fundamental processes of artistic expression through the creation of realistic and abstract prints. Students learn and practice responding to their own art and that of others including master printmakers through analysis, critique, and interpretation for the purpose of reflecting on and refining work.

#### Art Workshop

Prerequisite: Instructor approval

#### Grades 11-12

1 Credit, Repeatable

This one semester course is an independent studio course, in which students are expected to work independently on media of their choosing. They may experiment with many different media or specialize in one specific emphasis. Project pace and product are determined by the students (within reason). Students are expected to be independent thinkers and problem-solvers, and further their artistic skills.

#### **Career and Technical Education**

Career and technical education courses prepare students for employment in current and emerging occupations. In additional to academic knowledge, reasoning and problem-solving skills, and employability skills, courses in CTE service areas provide occupation-specific training. Iowa recognizes six CTE services areas: agriculture, food, and natural resources; applied sciences, technology, engineering, and manufacturing; business, finance, marketing, and management; health sciences; human services, and information solutions. Several of the service areas are further divided into subcategories.

#### Agriculture, Food, and Natural Resources

The agriculture, food, and natural resources cluster of classes is designed to prepare students for college, technical training, apprenticeships and careers requiring high achievement in science, math and communication. This diverse cluster of classes prepares learners for careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services, including food, fiber, wood products, natural resources, and other plant and animal products. It also includes related professional, technical, and educational services. Students interested in this field can work in agribusiness, ag science, fisheries, forestry, horticulture, and wildlife, including becoming a veterinarian or veterinary technician.

#### Introduction to Agriculture Science I

#### Grades 9-12

#### 1 Credit

This one semester course is an introductory course to agriculture, food, and natural resources. We look at multiple topics related to agriculture and leadership. You will experience hands-on activities, projects, and problems. Topics include the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. Along with the classroom work, students will be encouraged to join and be involved in the FFA. Each student will have the opportunity to work on individual leadership skills and personal development. Students will also be encouraged to have a Supervised Agricultural Experience (SAE). All students involved in agriculture education classes will be expected to have a project designed to help them learn business skills, record keeping, and involve hands-on experiences.

#### Introduction to Agriculture Science II

Prerequisite: Intro to Ag Science I preferred Grades 9-12 1 Credit This one semester course is a continuation of Introduction to Agriculture Science I.

#### Introduction to Animal Science I

Prerequisite: Intro to Ag Science I and II preferred, or Instructor Approval Grades 10 - 12 1 credit Introduction to Animal Science is a one semester course that imparts information about the care and

management of domestic and farm animals. This course covers animal nutrition, health, behavior, selection, reproduction, anatomy and physiology, facilities, product processing and marketing. Students will study a particular species, for example, swine, cattle, horses, fowl, sheep and so on, or they may learn how to care for and maintain livestock as a more inclusive study.

#### Introduction to Animal Science II

Prerequisite: Intro to Animal Science I preferred, or Instructor Approval Grades 10 - 12 1 credit This one semester course is a continuation of Animal Science I.

#### **Veterinary Science**

Prerequisite: Intro to Animal Science I or II Grades 10 - 12 1 credit This course will develop students' understanding of the small, companion and farm animal industry, animal anatomy and physiology, animal nutrition, animal reproduction, animal ethics, and welfare issues, animal health, veterinary medicine, veterinary office practices, and animal services to humans. Career exploration will focus on veterinarians, veterinary lab technicians, office lab assistants, small animal production, research lab assistants, and animal nutrition lab technicians. Offered alternating years.

#### Food Science and Safety

Prerequisite: Intro to Animal Science I or II Grades 10 - 12

1 credit

Students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. Students will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Students will maintain a research-level laboratory notebook throughout the class documenting their experiences in a laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. Offered alternating years.

#### **Agribusiness Management**

Prerequisite: Intro to Ag Science I and II preferred, or Instructor Approval

Grades 10 - 12 1 credit

Introduction to Agribusiness is a one semester course that provides students with the information and skills necessary for success in agribusiness and in operating entrepreneurial ventures in the agricultural industry. This course may cover topics such as economic principles, budgeting, risk management, finance, business law, marketing and promotion strategies, insurance, and resource management. Other possible topics include developing a business plan, employee/employer relations, problem-solving and decision making, commodities, and building leadership skills. This course will also incorporate a survey of the careers within the agricultural industry. Offered alternating years.

#### **Plant Science**

Prerequisite: Intro to Ag Science I and II preferred Grades 10-12

1 Credit

In this one semester course, students will explore the fastest growing field in the agricultural industry. Students will be introduced to the various types of greenhouses. Students learn how to produce and culture plants in a temperature-controlled environment and examine variables like humidity, light and nutrients. This course will also provide an overview of growing different types of plants, producing food in a water environment to meet the needs of today's increasing population. The hydroponics area includes growing various fruits and vegetables without the use of soil. Students will learn how to address issues such as using less space for food production, water management, including testing for water quality, dissolved oxygen, pH, and ammonia. Students will also receive an introduction to landscape design and agronomy. Offered alternating years..

#### Applied Sciences, Technology, Engineering, and Manufacturing

A background in Applied Sciences, Technology, Engineering, and Manufacturing allows students to pursue opportunities in many fields of construction, such as carpentry, masonry, roofing, plumbing, and electricity. Applied Sciences, Technology, Engineering, and Manufacturing courses also provide the necessary background for students interested in drafting and architecture, and various types of engineering, such as civil, mechanical, and materials. These courses concentrate primarily on the ACE (Architecture, Construction and Engineering) career paths. All these courses include a component for career exploration and investigation.

#### Introduction to Architecture, Construction, and Engineering Technologies

Grades 9-12

1 Credit

This course is designed to give students a basic introduction and overview to the topics available in the applied sciences of technology, engineering, and manufacturing. It will cover a wide range of study of the following areas: Manufacturing, Energy and Power, Architecture/Construction, and Transportation. Most units will include safety, hands-on work, and in some areas a project. The curriculum is designed around exploration of these

systems, their impacts on society, and potential careers in each segment. Students will develop problem-solving skills, utilize research and investigation skills, and explore career awareness. Assessments are completed in class and are based on quality of work completed, employability skills, and other items as determined by the instructor.

#### **Architecture and Construction**

#### **Architectural Plans and Specs**

Prerequisite: Engineering Concepts recommended Grades 11-12

1 HS Credit, 3 College Credits

This semester course introduces the skills and methods for understanding and interpreting construction drawings and technical specifications for residential and commercial buildings. This course is offered at Springville Secondary for Kirkwood Community College credit.

#### **Construction Materials Processing**

Prerequisite: Intro to ACE or instructor approval Grades 9-12

1 Credit

This is a one semester foundational course for the architecture and construction cluster. Students will learn concepts in residential construction materials and building techniques through classroom investigations. Concepts include: job-site safety, lumber, foundations, rough framing roofing, interiors, and other topics within the construction cluster. Students will experience plan development, plan reading and creating project drawings, tool identification and safe usage, material identification, cost estimation, and production. Students will receive instruction in hand and power tool usage on applicable projects that utilize the knowledge gained from classroom investigations as they continue developing team-building skills by working collaboratively. Assessments are completed in class and are based on quality of work completed, employability skills, and other items as determined by the instructor.

#### **Construction Technology**

Prerequisite: Construction Materials Processing or instructor approval

Grades 9-12

#### 1 Credit

This one semester course is designed to advance the knowledge and practical skills that were introduced in the Construction Materials Processing. Students will be responsible for the construction of individual and/or group project(s) built throughout the semester. Projects will be determined by the needs and wants of the school and community. Projects are assigned and developed according to the skill levels and experience of the students. Projects can range from basic furniture and cabinetry to small building construction. There will be a wide range of topics investigated during each project, such as job safety, job site management, production planning, project problem solving, and project review. Assessments are completed in class and are based on work completed, employability skills, and other skills as determined by the instructor.

#### **Residential Construction**

Prerequisite: Construction Tech or instructor approval

Grades 11-12

#### 1 Credit

This one semester course provides introductory theory and lab experience in residential construction. The course covers a wide range of topics including but not limited to: lab and job-site safety, foundations, rough framing, building envelope, exterior finishes, interior finishes, and MEP's (mechanicals, electrical, plumbing). Students in this course will be able to: demonstrate the proper use of basic tools and techniques, as part of a construction crew; select and use hand and power tools; recognize unsafe working conditions; identify, describe, layout, measure, cut, and place components used in residential construction systems; follow instructions and take responsibility for information; identify mistakes and take corrective actions; and work effectively as part of a team.

#### Science, Technology, Engineering, and Mathematics

#### **Engineering Concepts**

#### Grades 9-12 1 Credit

This one semester course integrates technology-oriented applications of mathematics and science into basic engineering activities. Primarily concentrating on mechanical and structural engineering, topics include the engineering design process, design analysis, data collection and data analysis as well as career investigation. This course provides students with an overview of the practical uses of applying engineering concepts to simple lab projects. Projects include but are not limited to C02 cars and craft stick bridges. Assessments are completed in class and are based on quality of work completed, employability skills, and other items as determined by the instructor.

#### Business, Finance, Marketing, Management, and Information Solutions

Business, Finance, Marketing, and Management allows students to go in many different directions. Students who enjoy courses in this area might want to explore careers in business management, human resource management, marketing and public relations, sales, economics, accounting, or finance.

#### Finance

#### **Personal Finance**

Grades 9-12

#### 1 Credit

Use a data informed decision-making process as it applies to the roles of citizens, workers, and consumers. Be able to identify various forms of income and analyze factors that affect income as a part of the career decision-making process. Develop and evaluate a spending/savings plan. Evaluate savings and investment options to meet short- and long-term goals. Apply a decision-making model to maximize consumer satisfaction when buying goods and services. Evaluate products and services provided by financial deposit institutions to transfer funds. Analyze factors that affect the choice of credit, the cost of credit, and the legal aspects of using credit. Analyze choices available to consumers for protection against risk and financial loss. Analyze choices and resources available to consumers for financing postsecondary education.

#### Business, Management, and Administration

#### Introduction to Business

Grades 9-12

#### 1 Credit

Introduction to Business is a one semester course that surveys all aspects of business including economics, ethics, forms of business ownership, finance, marketing, and management. It will provide a foundation for students that plan on pursuing other business classes.

#### Accounting I

Grades 9-12

#### 1 Credit

Accounting prepares students to make educated and informed business and personal financial decisions. Students will gain the ability to—read, interpret, and analyze financial information; apply generally accepted accounting principles; explain how the accounting system provides business information; describe the various users of accounting information; and explain the dynamic nature of the business environment in which accounting information is used.

#### Accounting II

Grades 9-12 1 Credit Accounting II is a continuation of Accounting I. Computer Business Applications

#### Grades 9-12

1 Credit

Computer Business Applications is a one semester course that covers the use of Microsoft Office. Students will learn how to utilize different functions of Microsoft Word, such as drawing tools and formatting tools, create Excel spreadsheets, PowerPoint presentations, and Access databases. Students have the opportunity to become Microsoft Office Certified in this course.

#### Introduction to Entrepreneurship

Grades 9-12

#### 1 Credit

Examine the role entrepreneurs play in today's economy and recognize the unique personal characteristics and skills that successful entrepreneurs possess. Recognize trends in society that can lead to entrepreneurial opportunities. Use lean startup methods to generate, develop, and test ideas to identify market and business opportunities. Apply economic concepts when making decisions for an entrepreneurial venture. Develop a marketing strategy to introduce a product or service. Understand financial concepts and use the financial tools available to make sound business decisions. Recognize that entrepreneurs must establish, maintain, and analyze appropriate records to make business decisions. Develop a management plan for an entrepreneurial venture. Analyze how forms of business ownership, government regulations, and legal regulations affect entrepreneurial ventures. Develop a plan to launch and operate a business.

#### **Business Law**

Prerequisite: Introduction to Business

Grades 9-12

1 Credit

Business Law addresses statutes, cases, and regulations affecting businesses, families, and individuals in their interrelated roles. Students will learn the relationship between ethics and the law and describe the law's sources, the structure of the court system, different classifications of procedural law, and different classifications of substantive law while focusing on contract law, law of sales, employment law and consumer law.

#### Marketing

#### Introduction to Marketing

Grades 9-12

1 Credit

The role of marketing in business education has greater importance as students become more intuitive about marketing influences at younger ages. Marketing education introduces students to the processes involved in providing products and services that meet consumer needs and wants. As a major business discipline, marketing impacts local, domestic, and international economies.

#### Information Solutions

#### **Computer Science Discoveries I**

Grades 9-12

1 Credit

This one semester course presents students the computational practices of algorithm design, problem solving, and programming within a context that is relevant to their lives. Beginning with the 2021-22 academic year, this content was offered in the exploratory rotation. Students who had the content in middle school can enroll directly in Computer Science Discoveries II.

#### **Computer Science Discoveries II**

Prerequisite: Computer Science Discoveries I or successful completion of middle school computer science exploratory Grades 9-12

1 Credit

This course is a continuation of Computer Science Discoveries I.

#### **Computer Science Principles I**

Prerequisite: Computer Science Discoveries I or successful completion of middle school computer science exploratory & Computer Science Discoveries II Grades 9-12

1 Credit

This one semester course provides students the opportunity use programming, computational thinking, and data analytics to create digital artifacts and documents representing design and analysis in areas including the Internet, algorithms, and the impact that these have on science, business, and society.

#### **Computer Science Principles II**

Prerequisite: Computer Science Principles I Grades 9-12 1 Credit This one semester course is a continuation of Computer Science Principles I.

#### Health

Students interested in the field of health can apply that knowledge to a number of settings: direct patient care, alternative medical practitioner, medical research, or laboratory technology. Students interested in becoming physical, occupational, speech, or massage therapists benefit from a background in health.

One of the following courses is required for graduation:

#### **Health and Fitness**

Grades 9-12

1 Credit

This class will meet for one semester. Topics covered in this class include safety and injury prevention, substance use and abuse, nutrition and fitness, mental and emotional health, personal health, consumer health, and human growth and development, in combination with an active fitness component to convey the importance of life-long wellness habits.

#### Health and Life Management

Grades 9-12

1 Credit

This one semester course focuses on personal health topics such as nutrition, stress management, substance abuse prevention, etc. while developing decision-making, communication, interpersonal, and coping skills and strategies.

#### Independent/Off-site Options

#### **Career Exploration**

#### Area 10 Job Shadow Program

Grades 10-12 No credit

The Area 10 Job Shadow Program is coordinated by Workplace Learning Connection. Job shadows are onetime experiences, two to six hours long, where students shadow an employee at an area business partner to get a close up view of what a career entails. Students must complete an application and provide their own transportation. Students are allowed to participate in up to three job shadows per year. Students are expected to complete a minimum of two job shadows while in high school. Please see website for complete details: <u>http://www.kirkwood.edu/site/index.php?p=32896</u>.

#### Area 10 Internship Program

Prerequisite: Job shadow preferred Grades 11-12 1 Credit, Repeatable The Area 10 Internship Program is coordinated by Workplace Learning Connection. Internships require working 45-90 hours over the course of the academic term, and can be completed during the summer. The internship application is a vetted process with an application and interview. Not all students are accepted into the program.

#### Student Tutor Program

Prerequisite: Minimum GPA of 3.0, administrator approval, good standing behaviorally Grades 11-12 1 Credit, Repeatable P/F Grading

As the need arises for older students to help younger students struggling academically, we want to supply that need with students willing to tutor in either the elementary or middle school areas. Students who decide to take this opportunity will be assigned a student or students to tutor and/or mentor on a daily basis. This one semester course includes an orientation at the beginning of each semester and journal entries throughout the semester.

#### **Student Technology Team**

Prerequisite: Administrator approval, good standing behaviorally Grades 11-12 1 Credit, Repeatable P/F Grading

Students interested in technology who enroll in this one semester course will work with hardware and software under the guidance of the technology coordinator. A background in technology is important to success in this course. Students will repair district technology, work with teachers and students to implement technology, and participate in technology meetings as student representatives.

#### Iowa BIG

Grades 11-12

#### Credits vary

lowa BIG exists for any junior or senior student interested in hands-on learning, looking for an opportunity to explore a passion or interest, or is interested in putting academic knowledge to real world use in challenging ways. At lowa BIG, students work with businesses, nonprofit organizations, and local governments as a means of gaining valuable real-world and academic skills so students can succeed in a world of rapid and constant change. Here, students control and own their learning. Course standards and essential 21<sup>st</sup> century skills are learned through projects in our communities and with community leaders. Students registering for Iowa BIG should have three consecutive, open class periods. While subject to change, courses offered through lowa BIG include:

BUSINESS	ENGLISH	SOCIAL STUDIES	GENERAL ELECTIVES
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<ul> <li>Personal Finance</li> <li>Entrepreneurship</li> <li>Sales &amp; Marketing</li> <li>Introduction to Business</li> <li>Communications</li> <li>Contemporary Literature</li> <li>Writing in the Real World</li> </ul>	<ul> <li>Government</li> <li>Economics</li> <li>Psychology</li> <li>Sociology</li> <li>Using Technology to Solve Social Issues</li> </ul>	Introduction to Agile Mindset
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#### **Senior Year Plus Options**

lowa's students have several options for earning college credit in high school. The programs are outlined below. See <u>Senior Year Plus Guide</u> for greater detail.

#### **Advanced Placement (AP)**

Prerequisite: Varies Grades 9-12 Credits vary

AP courses are high school course taken for high school credit. Postsecondary credit may be based on the student's performance on the AP® exam. We offer AP courses through the Iowa Online Advanced Placement Academy (IOAPA), which was established to deliver Advanced Placement (AP) courses to high school students across the State of Iowa. AP courses give students an opportunity to receive college-level credit by way of coursework and examination while still in high school. Actual credit is determined by the college the student eventually attends. At the present time, AP web-based courses are available for IOAPA students through Apex Learning. Current course descriptions and syllabi are available at <a href="https://www.iowaapacademy.org">www.iowaapacademy.org</a>.

#### **Concurrent Enrollment**

Prerequisite: Proficiency in English language arts, mathematics, and science as established by Senior Year Plus regulations or board approved proficiency standards found on pg. 40.

# Grades 9-12

Credits vary

Students may enroll in a contracted community college course and earn both high school and postsecondary credit upon sucessful completion of the course. This program promotes rigorous academic or career technical education (CTE) pursuits by providing opportunities for high school students to enroll in eligible nonsectarian courses at or through community colleges. Springville contracts with Kirkwood Community College to provide courses to our students. These courses may be meet in the following formats:

- Face-to-face in the high school
- Face-to-face at a college campus or satellite location
- Online

#### **Postsecondary Enrollment Option (PSEO)**

Prerequisite: Proficiency in reading, mathematics, and science as established by Senior Year Plus regulationsor board approved proficiency standards found on pg. 40

Grades 11-12, 9-10 if identified as gifted and talented

#### Credits vary

Postsecondary Enrollment Options (PSEO) program is intended to promote rigorous academic pursuits and to provide a wider variety of options to high school students. The program allows eleventh and twelfth grade students, as well as ninth and tenth grade students identified as gifted and talented by their local district, to enroll in college courses. Through the program, individual students may enroll in a college or university course if the course is not offered at their school. Successful completion of the course also generates high school credit and applies toward district subject area and graduation requirements.

The failure of a student to complete or otherwise receive credit for an enrolled course requires the student, if 18 years of age or older, to reimburse the school district for the cost of the enrolled course. If the student is under 18 years of age, the student's parent or guardian shall sign the student registration form indicating that the parent or guardian assumes all responsibility for the costs directly related to the incomplete or failed coursework.

Postsecondary courses eligible for students to enroll in under PSEO shall be limited to:

- Nonsectarian courses.
- Courses that are not comparable to courses offered by the school district where the student attends which are defined in rules adopted by the board of directors of the public school district.
- Credit-bearing courses that lead to an educational degree. Please note a postsecondary certificate does not meet the definition of a degree. If a course is only a part of a certificate program, it is not eligible for PSEO.
- Courses in the discipline areas of mathematics, science, social sciences, humanities, and vocational-technical education; and also the courses in career option programs offered by area schools established under the authorization provided in Iowa Code chapter 260C.

#### Summer College Credit Programs

Prerequisite: Vary Grades 9-12 Credits vary

Individual students enroll in a contracted community college course for both high school and postsecondary credit at no cost to the district or student. Students entering grades 9-12 are eligible, including non-graduated twelfth-grade students. This program is designed to increase participation in career and technical education programs aligned to in-demand occupations. The SCCP, authorized in 2018 as part of the Future Ready Iowa Act (House File 2458), has three primary goals:

1. Provide greater access to college-credit coursework in CTE programs by allowing high school students to enroll at an Iowa community college during the summer at no cost.

2. Allow high school students to explore and start on paths to obtain credentials linked to highdemand fields.

3. Maximize the investment made by community colleges, school districts, business partners and others in modern CTE facilities and equipment through innovative summer programming.

#### Kirkwood College Credit in High School

Kirkwood offers opportunities for students to earn college credit while in high school at no cost to families. These courses are the perfect opportunity for students to get hands-on experience while gaining exposure to careers they want to pursue after graduation. All of the classes students take at Kirkwood are for both high school and college credit.

Students can earn college credit in high school through Kirkwood in a variety of ways. Options range from taking a class or two for transfer credit (within the walls of their high school, online or face-to-face at a Kirkwood location) to completing a sequence of courses in a Career Academy. Career Academies are packaged courses, offered at Regional Center locations, which focus on career exploration while also aligning with industry workforce needs. Students work through their high school counseling office or local Kirkwood Student Academic and Support Coordinator to find out what courses would be best for them and learn more about Career Academy offerings available.

#### **Kirkwood Academies**

Grades 9-12 2 Terms

Credits varv

We offer students off-campus career academy courses by way of a partnership with Kirkwood Community College and other area high schools. Courses are held at the Jones County Regional Center in Monticello. Students receive high school and college credit for academy courses. Contact the school counselor with questions. Information can also be found at <u>www.kirkwood.edu/careeracademies</u>. Students are asked to consider how they demonstrate the indicators of success found on page 42 as they explore academy enrollment.

#### Student Proficiency Standards for Participation in Concurrent Enrollment Programs

Students who wish to enroll in liberal arts courses must be proficient in English language arts, mathematics, and science on the most recent administration of the ISASP or meet proficiency standards outlined below and approved by the school board. This does not apply to participation in career and technical education courses. Springville students can meet any of the following proficiency requirements.

1. Proficiency in English language arts, math, and science on most recent Iowa Statewide Assessment of Student Progress (ISASP) test.

Grade	Assessment	Not-Yet-Proficient	Proficient	Advanced
8	Math	385 to 489	490 to 605	606 to 720
	Science	385 to 507	508 to 608	609 to 720
	English Language Arts	385 to 493	494 to 593	594 to 720
9	Math	410 to 512	513 to 625	626 to 750
	Science	-	-	
	English Language Arts	410 to 504	505 to 617	618 to 750
10	Math	435 to 536	537 to 653	654 to 780
	Science	435 to 544	545 to 655	656 to 780
	English Language Arts	435 to 529	530 to 641	642 to 780
11	Math	460 to 558	559 to 674	675 to 800
	Science	-	-	
	English Language Arts	460 to 560	561 to 659	660 to 800

Senior Year Plus, Guidelines for Educators and Educational Administrators, 2021

- 2. A High School GPA of 2.8 or greater
  - Students who have a GPA lower than 2.8 but have earned a 3.0 GPA (or higher) in recent content specific classes
  - For Sophomores, Kirkwood would recommend at least a 3.3 GPA (or higher)
- 3. A grade in the B range or higher in previous corresponding course work during the ninth and tenth grade years.
- 4. Proficiency on ACT Assessment
  - English = 18
  - Reading = 18
  - Math = 19
- 5. Proficiency on SAT Assessment
  - English/Writing = 430
  - Math = 510
- 6. Student success in Advanced Placement or other Concurrent Enrollment classes.
- 7. Discipline specific high school instructor recommendation. For example, a student who wishes to enroll in a college level history course, should obtain a recommendation from their high school social science instructor. Instructors can use the Indicators of Success in Concurrent Enrollment Rubric as a resource if they choose.
- 8. Other criteria as stated by the Iowa Department of Education in their guidance dated July 14, 2020

#### Additional information specific to participation/placement into ENG-105: Composition I

For Placement into Composition I, Kirkwood strongly recommends...

- A High School GPA of 3.0 or greater. High School GPA is our greatest predictor of student success.
  - For Sophomores, Kirkwood would recommend at least a 3.3 GPA (or higher).

• Students who have a GPA lower than 3.0 but have earned a 3.5 GPA (or higher) in recent English/Language Arts classes can be considered for Composition I.

If you are a:	And your HS GPA is at least:	Recommended Placement
Rising Junior	3.3	Composition I
Rising Senior	3.0	Composition I

- ACT-English score of 18 or higher. This can be a valuable supplemental point of data to determine a student's readiness for Composition I.
- We also recommend looking at student-success in Advanced Placement or other Concurrent Enrollment classes (if applicable). Students who have found success in AP or other Concurrent Enrollment classes tend to succeed in our Composition I class.

# **SELECT FOR SUCCESS** THE RIGHT STUDENTS FOR THE RIGHT REASONS

Kirkwood partners with area school districts to prepare students to learn essential skills and earn college credit through a variety of concurrent enrollment options. Iowa law requires students, instructors and institutions to meet certain criteria to be eligible to participate in this programming.

#### To participate, students must:

• Satisfy Kirkwood Community College prerequisites, which may include a satisfactory placement score for reading, writing and math, indicated by the college's recognized placement exams.

#### **OPTIONS TO EARN COLLEGE CREDIT IN HIGH SCHOOL AT KIRKWOOD:**

#### Arts and Science Academy

 To participate in liberal arts courses, students must demonstrate proficiency in each of the three academic areas – math, science and reading – as indicated by Iowa Assessment Testing or an alternative measure of proficiency adopted by the school board. Students must also satisfy Kirkwood Community College prerequisites.

#### **Career Academy**

• Participation in career and technical courses is not based on proficiency of Iowa Assessment scores. Students will need to satisfy Kirkwood Community College prerequisites on individual courses as needed.

# ADDITIONAL INDICATORS OF SUCCESS:

#### Academic skills or standing:

- Satisfactory attendance record
- · Successfully completes related high school coursework (where applicable)
- · Completes all assignments by due date, including assigned readings
- · Demonstrates self-motivation as a learner
- · Applies classroom learning to real-life cases, observations and service learning
- Has a minimum cumulative GPA of 2.5

#### Personal traits/dispositions:

- · Demonstrates respect for others
- · Exhibits intellectual curiosity and openness to new ideas
- Works well as part of a team
- · Demonstrates honesty and ethical decision-making
- Willingness to devote several hours each week outside of class to study, review and prepare for coursework

#### Maturity:

- · Demonstrates self-advocacy and communication of needs
- Completes successful transition into junior or senior year of high school
- Successfully manages academic, work, extracurricular and other commitments
- Takes responsibility for their learning and success



#### Language Arts

Employers prefer jobseekers with strong written and oral communication skills. Someone with a passion for language arts can work as a print or online newspaper or magazine writer or editor, a librarian, reporter, desktop publisher, or administrative assistant, just to name a few, and strong language arts skills enhance employability in all fields.

#### English 9

#### 2 Credits

Ninth-grade English is the first full year course in the series of English requirements for the high school student. It prepares ninth graders for high school reading, writing, and speaking. Reading includes a variety of literary genres. Writing is both expository and creative with emphasis on usage, grammar, spelling, and vocabulary. A research paper and presentation are included in this course.

#### English 10

Prerequisite: Successful completion of English 9

2 Credits

Tenth-grade English is a required full year class for high school students. It continues to refine the skills of reading, writing, and speaking that began in ninth grade. The reading material includes a variety of literary genres. Various types of writing are exercised throughout this course, including research.

#### English 11

Prerequisite: Successful completion of English 10

2 Credits

Eleventh-grade English is a required full year class, which emphasizes both the fiction and non-fiction genres of American authors and the connection between the authors and the material. The writing projects will include creative writing, essays, and research. The research will culminate with a major persuasive paper and presentation.

#### **College English**

Prerequisite: Successful completion of English 11 with a minimum grade of B or instructor approval Grade 12

2 Credits

This full year course emphasizes preparing students for college. In the area of literature, students read and analyze classics commonly discussed in college courses. In the area of writing, the students experience styles of writing needed in college. This class is fast-paced and the student needs to be able to work independently.

#### **Oral Communication**

Grade 12

1 Credit

Oral Communication is a one semester course designed to help each student improve his/her communication skills. Emphasis is placed on developing human relationships, speech presentations, and general communication skills.

#### **Workplace Communication**

Grade 12

1 Credit

Workplace Communication is a one semester course that enables students to develop communication skills that can be used in a variety of professional situations. The course is designed to help students improve their communication skills. Emphasis is placed on developing professional relationships, presentation skills, and general workplace communication skills.

#### Poetry

Grades 9-12

# 1 Credit

The biggest barrier to appreciating poetry is understanding it. In this one semester course, students will closely read and analyze notable poetry from the 19th and 20th centuries. The course will focus on interpretation and appreciation of poetry. Through this, students will gain a deeper understanding of figurative language and

abstract thought. Assignments will include analytical essays, annotations, close reading reflections, and developing a portfolio of an influential poet.

#### Writers' Workshop

# Grades 11-12

# 1 Credit

This one semester class is an elective geared to creative writing pursuits of the individual student. Emphasis will be placed upon creativity, audience awareness, writing and creativity methodology, and reader appeal. Students will be encouraged and directed to study themselves as writers and identify and hone their own writing styles. Writer/reader interaction will be done regularly. The class is structured as a workshop with individuals following both prescribed and individual writing pursuits. Grades will be based upon volume of writing in free flows and prescribed writings, experimentation, sharing, interaction with other writers as responders, individually selected writings carried to publication, and a large, individually planned and created project. This course will emphasize the production of a literary magazine and other journalistic pursuits.

#### **Contemporary Literature**

# Grades 9-12

#### 1 Credit

This one semester course will examine literature and discuss their relation to current events. Students will be asked to apply themes, plots, and characters to present-day issues. Understanding will be expressed through the use of projects, presentations, and comparative analyses.

#### **Multicultural Literature**

Grades 9-12

#### 1 Credit

This one semester course will offer a diverse look into literature encompassing various countries, belief systems, and lifestyles. Students will participate in discussion over a variety of topics unique to the cultures represented. They will demonstrate understanding of these multicultural works through analytical papers, presentations, and discussions.

#### **Mathematics**

Someone with an interest in math can find work in any number of fields. Statisticians, actuaries, surveyors and GIS specialists, physicists, cost estimators, computer scientists, surveying and mapping technicians, engineers of all sorts, and painting contractors need strong math skills.

Students are required to complete Algebra I, Geometry, and Algebra II.

#### Algebra I

Grade 9

2 Credits

This full year course expands students' knowledge and skills into the more abstract concepts of algebra. This course provides the mathematical foundation for Geometry, Chemistry, Physics, Biology, and most business courses. This course will include the following topics: rules and properties of algebra, solving equations, inequalities, and algebraic systems, operations and properties of exponents and radical expressions, representations of linear models in tables and graphs, and operations and properties of quadratic equations and other polynomials.

#### Geometry

Prerequisite: Successful completion of Algebra I recommended Grades 9-12

#### 2 Credits

This full year course expands the mathematical fundamentals learned in Algebra I into the applied concepts of geometric shapes and theory. The students will learn inductive and deductive reasoning techniques and skills, geometric construction, the properties of geometric shapes, congruence and similarity, transformations and tessellations, geometric area and volume calculations, Pythagorean Theorem and right triangles.

#### Algebra II

Prerequisite: Successful completion Algebra I, Geometry preferred Grades 9-12

2 Credits

This full year course extends and deepens the student's knowledge of algebraic and geometric concepts in order to prepare them for college level mathematics. This course includes the following topics: the use of graphing calculator functions, operations with more complex fractions, simplifying radical expressions, operations and composition of functions, solving quadratic functions, equations and inequalities, solving two and three variable systems, operations and properties of matrices, beginning trigonometry, higher order polynomial factoring and operations, introduction to complex numbers.

#### Pre-calculus

Prerequisite: Successful completion of Algebra II Grades 9-12

2 Credits

This full year course is intended for students who are college-bound in a scientific and/or engineering field of study. The course includes the following topics: advanced functions, advanced trigonometry, vectors, polar coordinates, parametric equations, conic sections, limits and their properties, derivatives, differentials, and integrals.

#### Calculus

Prerequisite: Successful completion of Pre-calculus or Instructor Approval

Grades 11-12

2 Credits

In Calculus, students learn to understand change geometrically and visually, analytically, numerically, and verbally. Instead of simply getting the right answer, students in this full year course learn to evaluate the soundness of proposed solutions and to apply mathematical reasoning to real-world models.

# **Probability & Statistics**

Prerequisite: Successful completion of Algebra I and Geometry Grades 10-12

# 1 Credit

Probability and Statistics is a one semester course that introduces the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency and variation, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

# **Consumer Math**

Prerequisite: Successful completion of Algebra I

Grades 10-12

1 Credit

This semester course reinforces general mathematics topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and applies these skills to consumer problems and situations. Applications include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment. Offered alternating years.

#### **Technical Math**

Prerequisite: Successful completion of Algebra I

Grades 10-12

1 Credit

Technical Mathematics is a one semester course that extends students' proficiency in mathematics and applies skills to technical and/or industrial situations and problems. Technical Mathematics topics may include but are not limited to rational numbers; systems of measurements; tolerances; numerical languages; geometry; algebra; statistics; and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate. Offered alternating years.

#### Music

Music careers are many and varied. Students interested in music can become performers, but there are many more careers in writing and producing music, such as arranger, producer, orchestrator, composer, film scorer, jingle and songwriter, and conductor. Those interested in the business side of music can become a booking agent, business or personal manager, music merchandiser, or music publisher. There are also careers that require an understanding of music and technology: MIDI engineer, producer, programmer, sound designer, or sound technician. Individuals interested in using music to help others can explore careers in music therapy. Music can be combined with other interest areas to lead to rewarding careers.

#### **Music Appreciation**

#### Grades 9-12

#### 1 Credit

In this one semester course, students will gain an understanding of music and its importance in their lives. Course content focuses on how various styles of music apply musical elements to create an expressive or aesthetic impact. Students may have the opportunity for informal music performance and creation within the classroom.

#### **Music Recording and Production**

Grades 9-12

1 Credit

In this one semester course, students will gain an opportunity to learn and apply skills in music recording techniques, music editing, mixing, and creating finished musical recordings for distribution as sound files in order to enhance, convey, and capture the expressive intent of music.

#### **Instrumental Music**

#### **Concert Band**

Grades 9-12 2 Credits

The Concert Band is the core performance group in the instrumental music program and members are enrolled for a full academic year. All members of this group also perform as members of the marching band and the pep band. Concert Band is open to any student, although those without prior instrumental experience may be asked to take lessons with the director prior to enrolling. Students will study both Western and international traditions of music primarily through performance. In addition, students are encouraged to participate in solo and small ensemble music experiences. Participation in all concerts and large group contest is required. All students using a school instrument, including percussionists, must pay a rental fee of \$25.00 a rental per semester.

#### **Musical Pride Marching Band**

#### Grades 9-12

All Concert Band Members are required to participate in Marching Band. Marching Band takes place during the first quarter of school, with an additional summer band camp that takes place prior to school starting. Marching Band is also open to seventh and eighth grade students. Participation in all performances is required.

#### Jazz Band

#### Grades 9-12

The Jazz Band rehearses before school during the second and third quarters of the school year. Members of this group are selected from the concert band. As per state requirement, all jazz band members must be enrolled in concert band or attending at least three practices for concert band each week. Jazz Band meets two to three times each week. Additional rehearsals may be added if needed. Participation in all performances is required.

**Vocal Music** 

#### **Choir** Grades 9-12 2 Credits

Concert choir is open to all high school students, and members are enrolled for a full academic year. In the first semester, there are two to three mandatory performances. In the second semester, students will perform in Night on Broadway and a spring concert. This course offers a variety of extracurricular opportunities that are suggested, but not mandated, such as singing the national anthem at community events and games, caroling in the community, and helping with elementary concerts.

#### Serenade

#### Grades 9-12

This high school select choir is an audition only choir that is open to all members of the concert choir. Auditions will be held in the fall of each year and voicing will be chosen at the discretion of the director. There will be early morning rehearsals starting in October/November and continue until the end of the school year. Solo/small group competition is required for this group.

#### **Physical Education**

Physical education allows students the opportunity to develop the knowledge and skills necessary to careers in recreation and fitness, recreational therapy, personal training, coaching, professional athletics, dancing, and any number of careers that place physical demands on the body.

# **Beginning Strength and Weight Training**

Grades 9-12 0.5 Credit, Repeatable

#### **Strength and Weight Training**

Prerequisite: Beginning Strength and Weight Training or Instructor approval

Grades 9-12

0.5 Credit, Repeatable

Strength and weight training includes a background of knowledge necessary to provide each student with a comprehensive personal fitness program. Basic concepts relating to exercise physiology, anatomy, and kinesiology will provide the student with the framework necessary to understand general fitness training concepts. Personal assessments, goal setting, and program design will allow students to monitor their progress. The instructor and student will plan specific exercise prescriptions. Students will keep a folder including daily logged workouts, goal sets, and assessments.

#### Lifetime Physical Education

Grades 9-12

#### 0.5 Credit, Repeatable

Lifetime PE seeks to achieve lifetime health and fitness through a combination of lifestyle choices, nutrition, and physical activity. This course introduces students to those physical activities that can provide life-long participation. Units include cardiovascular fitness, strength training, flexibility development, and methods for maintaining physical fitness through recreation and sport. Included are opportunities for instruction in bowling, cross-country skiing, walking, running, weight training, golf, tennis, self-defense, and aerobics.

#### **Recreational Sports Physical Education**

Grades 9-12

#### 0.5 Credit, Repeatable

Recreation Sports courses provide students with knowledge, experience, and an opportunity to develop skills more than one recreational sport or outdoor pursuit. Units may include basketball, football, volleyball, floor hockey, adventure activities, Frisbee, bocce ball, fishing, hiking, and soccer.

#### Science

Students interested in science can work as scientists of all sorts, including in earth and environmental sciences, engineering, life science, and physical science. Within each area are numerous careers such as climate change analyst, environmental compliance inspector, industrial health and safety engineer, meteorologist, part ranger, and water treatment plant operator for those interested in environmental sciences; those interested in engineering can go into biofuel or biodiesel technology and product development, environmental engineering, fuel cell engineering, or engineering technologies. The life sciences also offer many opportunities: agricultural inspector, audiologist, biological technician, medical and clinical laboratory technician, nuclear medicine, pharmacology, and zoology, to name a few. Those interested in the physical sciences have career options ranging from astronomer to landscape architect to robotics to wind energy.

There are several pathways a student can take through the science curriculum, depending on career goals:

General Science → Biology → Astronomy → Forensics (For those interested in the environmental and physical sciences)

General Science 

→ Biology 
→ Chemistry 
→ Physics (For those interested in technical and engineering sciences)

General Science → Biology → Chemistry → Anatomy (For those interested in the medical sciences)

Some students with a strong background in science may be able to begin their high school science pathway with biology. If this option is chosen, students must complete biology, chemistry, and physics to meet the requirements of the Iowa Core Curriculum. Students will be considered on the basis of standardized assessment scores and teacher recommendation.

#### **General Science**

Grade 9

#### 2 Credits

This full year course provides a general overview of the physical sciences. Students will focus on critical thinking and discovery of relationships between science and their everyday lives. The course will focus on a basic overview of matter (chemistry) in the first semester with the second semester focusing on energy (physics). Additionally, this course will look to build basic laboratory and observational skills needed for future science courses.

#### Biology

Prerequisite: General Science or Instructor Approval Grades 9-12

# 2 Credits

Students in this full year course will achieve a greater understanding of the living world. Topics include basic biochemistry, cellular biology, genetics, human anatomy, evolution, and an exploration of the plant and animal kingdoms. This course will include reading assignments, note taking from lectures, and laboratory explorations. Laboratory explorations will include observations of preserved and live specimens, microscope use, and dissections.

#### Astronomy

Corequisite: General Science

Grades 9-12

#### 1 Credit

Astronomy is a one-semester course that offers students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. Students will be introduced to and use astronomical instruments and explore theories regarding the origin and evolution of the universe, space, and time.

#### **Forensic Science**

Grades 9-12 1 Credit In this semester course, students will study the methods used by criminal investigators to solve crimes. Students will learn the methods used to analyze evidence from fingerprints to DNA. This course will include several lab activities.

#### Anatomy

Prerequisite: Biology Grades 11-12 2 Credits

This full year course will broadly focus on the different systems in the human body, how the systems work together and what happens when parts of the body malfunction. This course will include a study of major body systems, basic medical terminology, and select organ dissections.

#### Physics

Prerequisite: Algebra I Corequisite: Algebra II Grades 11-12 2 Credits This full year course is

This full year course is a non-calculus, algebra-based course. Physics will combine laboratory activities with lecture and problem-solving sessions. Physics course topics will include mechanics, sound, light, electricity, motion, and atomic and nuclear applications for daily living. Offered alternating years.

#### Chemistry

Prerequisite: Algebra I Grades 11-12 2 Credits

Chemistry courses involve studying the composition, properties, and reactions of substances. Students in this full year course typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. Offered alternating years.

#### **Social Studies**

A background in social studies complements many professions: archeology and anthropology; social sciences such as economics, sociology, and psychology; politics and government; law enforcement careers ranging from police officer to paralegal and lawyer to judge to parole or probation officer; and urban planning. Knowledge gained from these courses is useful to city and county clerks, clerks of court, and bailiffs.

#### World History

# Grades 9-12

#### 2 Credits

World History is a full year course. The first term covers the period from prehistory through the Renaissance and Reformation. It will cover such topics as Early Civilization, Greek and Roman times, Ancient Africa, Ancient Civilizations in Europe and Asia, the Renaissance and the Reformation. The second term covers world history from the 17th century and covers topics such as the Ages of Exploration and Enlightenment, the Industrial Revolution, the great World Wars, the Rise of Communism, the End of Imperialism, the Cold War, and the post-Cold War Era. This course is required for graduation.

#### **U.S. History**

Grade 9-12

#### 2 Credits

This full year course covers U.S. History from 1861 to the end of the 20th century. The Civil War, the closing of the frontier, Industrialization, Immigration, the Progressive Movement, the First World War, the Great Depression, World War II, Cold War America, the Civil Rights Movement, Vietnam, the Nixon and Reagan Eras, and post-Cold War America are covered. This course is required for graduation.

#### Economics

Grades 11-12

#### 1 Credit

The purpose of this semester course is to help develop an ability to understand and make reasoned judgments about major economic questions. The students will learn about the market economy, the impact of the government on the economy, and the unemployment-inflation dilemma. Personal economics will also be included as students will be introduced to personal investment and budgeting principles. This course is required for graduation.

#### Government

Prerequisite: US History

Grades 11-12

#### 1 Credit

This one semester course will cover an overview of government through the study of the United States Constitution and the federal system of government. The structure (executive, legislative, and judicial branches) and the relationships between the national, state, and local government will be studied. Students will examine the role and function of political parties, the growth of government, the philosophy of the democratic process, and the obligation of citizens in our society. Current governmental issues will also be analyzed and discussed throughout the class and applied to the lives of the students. This course is required for graduation.

#### Modern U.S. History

Grades 9-12

#### 1 Credit

Modern U.S. History is a one-semester course structured to give the student an understanding of current issues in many areas of a political, social, and economic nature. The course emphasizes research done by the student since the topics chosen are very fluid in their nature, meaning that the topics and the amount of coverage on the topics will fluctuate on any given day, week, or month depending on topics current in the media.

#### **Military History**

Grades 9-12

# 1 Credit

This one semester course is an elective history course surveying military history from antiquity to the present. The course seeks to take a glimpse of the various stages of military history over the past 5000 years, as it has

evolved and changed. To do this, various focus points have been selected in an attempt to create a broad view of this immense subject. The vastness of the material necessitates that not all stages of development and change can be covered but this allows the course a degree of freedom that is valuable in studying this subject and means that the course will surely evolve and change as it continues to be taught.

#### **History Through Film**

Grades 11-12

#### 1 Credit

This one semester course will discuss how the motion picture industry has changed since its origins in the early 1900's. Students will watch Oscar-winning movies and study award winning actors, actresses, and directors. There will be quizzes over the handouts on the movies and tests over the units studied. There will also be one paper written about an award-winning actor or actress. The main decades that will be focused on will be the 1950's, 60's and 70's. This class will explore how movies have made many social statements about the various time periods and the influence of past movies on today's culture.

#### Psychology

Grades 9-12

#### 1 Credit

Psychology provides tools to help us gain insight into our own behavior, as well as our relationship with others. In this one semester class we will explore the influences of society on individual behavior and group relationships, as well as biological explanations for human behavior. During the course you will learn more about the social and biological aspects of human behavior as you gain insight into your life and the lives of those around you. This class is strongly recommended for any student planning on attending college, as most colleges will require students to take at least one semester of psychology during their college careers.

#### Social Issues through Popular Culture

Grades 9-12

#### 1 Credit

Social Issues through Pop Culture is a one semester course that will focus primarily on current and historical social issues through the lens of popular culture. The focus of the class will be to examine social issues such as race, gender, sexual orientation, culture, etc. through music, sports, television, movies, etc.

#### World Geography and Current Affairs

Grades 9-12

#### 1 Credit

The intent of this one semester class is to provide students with an overview of world geography and connect the world geography to current affairs. Topics covered may include geographic, political, economic, and social issues of a particular country or region.

#### World Language

A second language is useful in a number of different ways: Students with a second language have a competitive edge in the job market, and they can work in international business, or as translators and interpreters, linguists, or teach a second language to English speakers or teach English to non-native speakers. Learning a second language opens up many opportunities in every field. Many colleges and universities require at least two years of foreign language credits, and some majors require four years. Keep your options open and take a foreign language in high school!

#### Spanish I

Grades 9-12

#### 2 Credits

This full year course is taught using comprehensible input. Input is the primary focus. Students will acquire the language by listening and reading to support their eventual output of writing and speaking. This course is taught using TPRS: Teaching Proficiency through Reading and Storytelling. Other forms of input include music, student-created stories, and novels written for language learners. By the end of Spanish I, students are expected to reach Novice- Mid on a proficiency scale.

#### Spanish II

Prerequisite: Successful completion of Spanish I with a minimum grade of C-

Grades 9-12

2 Credits

Spanish II is a full year taught using comprehensible input. Input is the primary focus. Students will acquire the language by listening and reading to support their eventual output of writing and speaking. This course is taught using TPRS: Teaching Proficiency through Reading and Storytelling. Other forms of input include music, student- created stories, and novels written for language learners. By the end of Spanish II, students are expected to reach Novice- High on a proficiency scale.

#### Spanish III

Prerequisite: Successful completion of Spanish II with a minimum grade of C-

Grades 9-12

# 2 Credits

Spanish III is a full year course taught using comprehensible input. Input is the primary focus. Students will acquire the language by listening and reading to support their eventual output of writing and speaking. This course is taught using TPRS: Teaching Proficiency through Reading and Storytelling. Other forms of input include music, student- created stories, and novels written for language learners. By the end of Spanish III, students are expected to reach Intermediate-Low on a proficiency scale.

#### Spanish IV

Prerequisite: Successful completion of Spanish III with a minimum grade of C-

# Grades 9-12

#### 2 Credits

Spanish IV is a full year course taught using comprehensible input. Input is the primary focus. Students will acquire the language by listening and reading to support their eventual output of writing and speaking. This course is taught using TPRS: Teaching Proficiency through Reading and Storytelling. Other forms of input include music, student- created stories, and novels written for language learners. By the end of Spanish IV, students are expected to reach Intermediate-Mid 2 on a proficiency scale.

# Spanish V

Prerequisite: Successful completion of Spanish IV with a minimum grade of C-

Grades 9-12

#### 2 Credits

Spanish V is the culmination of the Spanish sequence. This a full year experience is taught using comprehensible input. Input is the primary focus. Students will acquire the language by listening and reading to support their eventual output of writing and speaking. This course is taught using TPRS: Teaching Proficiency through Reading and Storytelling. Other forms of input include music, student- created stories, and novels written for language learners. By the end of Spanish V, students are expected to reach Intermediate-Mid 3 on a proficiency scale.

#### Appendix A



# **DEFINITION OF COLLEGE AND CAREER READINESS IN IOWA**

**College and Career Readiness in Iowa:** Iowa students who are college and career ready have acquired the necessary knowledge, skills, and strategies to be successful in post-secondary opportunities as demonstrated through multiple sources of evidence, including those generated by students. Iowa students who are college and career ready have successfully:



Outcome categories with description on back side



# **DEFINITION OF COLLEGE AND CAREER READINESS IN IOWA**

**Outcome categories with description:** The following outcomes begin to define the knowledge, skills and strategies that students who are college and career ready have acquired. The four areas are highly interdependent and mutually enhancing; as students develop skills in one area it enhances the development of skills in other areas.

