

Regular Meeting

Monday, December 15, 2014 6:00 PM

Central 301 District Office, 275 South St, P.O. Box 396, Burlington, IL 60109

1. **Meeting Call to Order**

A. Roll Call

B. Approve Agenda

2. **Pledge of Allegiance**

3. **PUBLIC OPEN FORUM**

A. Recognition of Visitors

B. Public Comment

C. Correspondence and Recognition

4. **ACTION REPORTS**

A. Consent Agenda

B. Treasurer's Reports

C. Approve Yamaha Piano Donation

D. Approve resolution for the 2014 tax levy

E. Approve resolution for interfund transfers Transportation Fund to Education Fund and O & M Fund

F. Approve resolution abating the Working Cash Fund of the Community Unit School District 301, Kane and DeKalb Counties, Illinois and abating a portion of the taxes heretofore levied for the year 2014 to pay debt service on School Bonds, Series 1999, of said School District

G. CTE Curriculum

H. AP Environmental Science Curriculum

I. Physical Education Curriculum

J. English Curriculum

K. Policy 7:100 Immunization Requirements

L. Policy 7:180 Prevention of and Response to Bullying, Intimidation, and Harassment

M. Approve Spring Baseball Overnight Trip

5. **INFORMATION REPORTS**

A. Committee Reports

B. High School, Middle School, Elementary School Schedule Committee Recommendations

C. Illinois State Scholars

D. Naviance Presentation

E. Student Performance Data Including Attendance/Drop Out Rates

F. 5Essentials Survey Presentation

G. 2015-2016 Calendar

H. Technology Infrastructure Upgrades

I. Enrollment Report

6. **FREEDOM OF INFORMATION ACT (FOIA)**

A. IEA - Jackie Robbins requesting -- all discipline records for all support staff employees in the District excluding managerial, supervisory and confidential employees, for the school years 2014-15, 2013-14, 2012-13, 2011-12

7. **EXECUTIVE SESSION**

A. Open Session

B. Approve Personnel Report

8. **BOARD OPEN FORUM**

9. **ADJOURNMENT**

Living Online

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Course Description

Microsoft offers an IC3 certification exam, which includes three components: Online Living, Computing Fundamentals, and Key Applications. This course focuses on the Online Living certification, which utilizes Office (Microsoft Word, Excel, Outlook, file management, Internet searching, cloud computing, & trouble-shooting).

This course develops the skills toward IC3 certification to prepare students for lifelong learning in the 21st Century. Using business computer applications and other technologies, students will maximize their ability to communicate, collaborate, and think critically and socially online in a safe and ethical way. Additionally, students will apply these skills today necessary to advance their education, and employment opportunities that require fluency with these standardized programs.

Timeframe	Unit	Scope And Sequence
		Instructional Topics
9 Week(s)	Living Online	1. Communication Networks and the Internet 2. Electronic Communication and Collaboration 3. Using the Internet and the World Wide Web 4. Web Content & Computer Safety & Ethics 5. Real world project

Materials and Resources

- Supportive textbook
- 2. Software: online access support for training, assessments and projects; Microsoft Office (latest version); SchoolVue
- 3. Hardware: computer lab with necessary memory to run and operate the software; projector; screen

Course Details

Unit: Living Online

Duration: 9 Week(s)

Overarching Essential Question(s) Covered

How does knowing how to use computer applications and other technologies maximize your ability to effectively communicate, collaborate, and think critically and socially online?

Textbook/Materials/Resources

- 1. Textbook
- 2. Software: Microsoft Office (latest version); SchoolVue and other software as needed
- 3. Hardware: computer lab with necessary memory to run and operate the software; projector; screen

Academic Vocabulary

analyze, conclude, author's purpose, describe, resolution, dialogue, specific, meaning, determine, point of view, develop, author, compare, contrast, experience, viewing, perception, similarities, differences, accurate, detail, event, elaborate, explain, illustrate, individual, section, paragraph, graphics, headings, media, issue, information, summarize, evaluate, argument, evidence, valid, claim, presentation, perspective, facts, reasons, details, credible source, persuade, style, conclusion, transitions, audience, formal style, conclusion, introduction, formatting, selection, organization, analysis, setting, rising action, sequence, task, purpose, planning, editing, publish, keyboarding, medium, collaborate, interact, skills, key words, site source, internet search, research, project, inquiry, bibliography, digital source, credible, paraphrase, plagiarism, support, reflection, summary, edit, suggest, opinion, textual evidence, synonyms, antonyms, word choice, information, sequence, concrete details

Content Specific Vocabulary

networks, firewall, hacker, internet, cable modem, router, server, information sharing, collaborative environment, hardware sharing, software sharing, enhanced communications-electronic mail, text messages, social media, blogs, malicious code, LAN, WAN, client/server network, Internet, World Wide Web, address book, archiving, attachment, contact group, e-mail address, instant messaging, packet, save a message, signature, spam, text messaging, fraud, netiquette, phishing, Trojan horse, virus, worm, trouble-shooting, domain, Hypertext Markup Language (html), Hypertext Transfer Protocol (http), podcast, portal, social networking site, Uniform Resource Locator (URL), web app, Boolean logic, copyright, intellectual property, link, math symbol, plagiarism, public domain, search engine, keyword, online learning, strong password, safe username, repetitive strain injury (RSI), ergonomic

Network Fundamentals

address A unique identifier applied to each device on a network.

cable modem A network device that uses existing cable television lines to send and receive data.

client Accesses the shared resources, services, and programs provided by the server.

client/server network In this network design, one or more computers on the network act as a server; the computer providing the service is the server, and the computer that requests and uses the service is the client.

communications protocol A description of the rules computers must follow to facilitate device identification and data transfer.

digital subscriber line (DSL) A modem that uses an Internet connection technology that provides for the transfer of information to a computer at a high-speed bandwidth over ordinary copper telephone lines.

Domain Name Server (DNS) Maintains a directory of domain names and their correlated IP addresses and translates the Web address to an IP address and directs your Internet connection to the Web site.

Ethernet cable The most common type of connection used to connect devices in a local network; looks much like a regular phone jack, but it is slightly wider.

Extranet Similar to an intranet, this type of network allows specific users outside of the organization access internal information systems in an intranet.

gateway Connects networks using different communications protocols so that information can be passed from one network to the other.

hub A network device that joins all the devices of a network together; every network device connects directly to the hub through a port; when a frame of data arrives from a connected device, the hub forwards the frame to all the other connected devices.

Integrated Services Digital Network (ISDN) A service that can send voice, video and data over digital or analog telephone lines.

Internet A worldwide system composed of thousands of smaller networks.

Internet Service Provider (ISP) Provides connection to the Internet.

intranet A network type designed for the exclusive use within an organization.

IP address Identifies the host device and the network to which it belongs; usually assigned by the network administrator or the Internet service provider.

local area network (LAN) Connects computers, workstations, and other devices that are relatively close to each other, such as printers and scanners within a confined space, such as an office building, school, or home.

Media Access Control (MAC) An address for communications on the physical network segment; assigned by the manufacturer of the device.

modem A network device that enables a computer to transmit data over telephone lines.

Network Interface Card (NIC) A network devices that makes the electrical and electronic connections between a computer and a network; usually built into the computer motherboard or installed as an expansion card.

packet switching Splits data into manageable packets (small pieces), allowing a more efficient flow in the transmission of the data.

peer-to-peer network (P2P) In this network design, all the computers are equal and no computer is designated as the server; all computers can act both as a client and a server.

public switch network (PSN) A common carrier network that provides connections among public users.

public switched telephone network (PSTN) The international collection of interconnected voice-based public telephone networks.

router A network device that directs the flow of data from a local area network (LAN) to another network connection, either a LAN or a WAN.

server Provides a service to one or many clients, such as sharing files, folders, and printers.

switch A network device that performs the same tasks as a hub, but it works much faster; instead of sending the frame of data to all connected devices, a switch filters the target for the frame and forwards the frame only to a specific device in the LAN.

T-1 line A type of fiber-optic telephone line that can transmit voice and data at the same time.

Virtual Private Network (VPN) A network service that enables remote users to use a public network (usually the Internet) to access their private networks (usually a home or office network).

Voice over Internet Protocol (VoIP) A system that converts your telephone signal into digital and uses the Internet to deliver voice communications.

wide area network A network that contains a substantial number of computers and covers a large geographical area (a state, country, or even the world).

wireless local area network (WLAN) A variation of the LAN that connects devices with a wireless connection.

Communication Services

archiving The process of backing up your e-mail messages.

channel The media that carries or transports the message, such as the radio signal or the coaxial cable.

conversation Sometimes referred to as the message thread; the complete set of e-mail messages from the original message through all the responses.

credentials Include information to authenticate your identify when you log on to a Web site or an Internet service, such as a username and a password.

domain name An address of a computer network connection that identifies the owner of the address.

HTML (Hypertext Markup Language) The default format in Outlook that supports text formatting options such as multiple fonts, bold text, colored headings, graphics, and links to Web sites.

password A word or string of characters that provides access to the service features.

Plain Text format A plain text format with no colors, hyperlinks, or graphics.

protocols The rules that govern the transfer of data and ensure that information created by one system can be interpreted and read by another user agent.

Rich Text Format A text format similar to HTML that enables you to apply text formats including fonts, paragraph alignment, bulleted lists, and hyperlinks; only supported by Microsoft e-mail applications.

signature Consists of text or graphics that you create so Outlook can automatically add it to the end of any outgoing messages.

spam Unsolicited e-mail; in many instances, used to advertise products and services.

user agent A software application such as e-mail, text message, or an instant messaging program.

username A name that identifies you when you log on to a Web site or an Internet service.

Communications and Collaboration

chatting Talking to other people in real-time on the Internet; most commonly, the talk is created with typed messages, but a chat can also be conducted using sound or sound and video.

cyberbullying Using Internet technology to intentionally harass, threaten, embarrass, or target another person.

flaming An intense, online verbal argument.

interactive whiteboard A computer program that allows participants in a video conference to interact and make changes to a document.

libel A written communication that is an untrue statement that can damage a person's or a company's reputation or character.

Multimedia Messaging Service (MMS) Extends the core capability of SMS and enables you to send messages that include multimedia content.

netiquette Refers to good manners and proper behaviors when communicating through electronic media.

podcast A method of publishing files (primarily audio) to the Internet that can be downloaded for playback on a computer or a mobile device.

real-time communications Occur instantly or without noticeable delay.

Short Messaging Service (SMS) Technology initiated the development and growth of text messaging, is a service provided by phone, Web, or mobile communication systems for text messaging.

slander An oral communication that is an untrue statement that can damage a person's or a company's reputation or character.

social media A term used to describe a variety of Web-based platforms, applications and technologies that enable people to keep in touch with friends, find people with similar interests, and build relationships online.

text messaging Often referred to as texting or Instant messaging (IM), is a text-based form of communication primarily used for conversational text.

time-shifting mode When you send messages by email, post information on a bulletin board, or publish a blog, there can be a significant delay between the transmission and the receipt of the information.

video chat Where you see the person with whom you are talking.

video conferencing Using computer networks to transmit audio and video data.

VoIP (Voice over Internet Protocol) Technology that enables the delivery of voice communications and multimedia sessions using Internet Protocol.

Web conferencing (Also referred to as a Webinar.) A presentation, lecture, workshop or seminar that is transmitted over the Web.

Using the Internet and the World Wide Web

browser plug-ins Also referred to as add-ons; optional software apps that add functionality to a Web browser.

cache memory High-speed RAM (random access memory) that serves as a temporary storage area for data and it is continually updated.

domain A group of computers and devices on a network that are administered as a unit with common rules and procedures.

domain name Provides an online identity (such as an organization or company name).

firewall Blocks unauthorized network access either within its own LAN or to and from the WAN.

gateway A computer or dedicated hardware device that connects a LAN (Local Area Network) to another network, typically the Internet, a WAN (Wide Area Network).

home page The first page that appears in the browser when you visit a Web site; your opening to the WWW.

hotspot Provides Wi-Fi network access (usually Internet access) access to a small area for wireless-enabled devices such as laptops, tablets, and smart phones.

hyperlinks Also referred to as links; automatically connect you to another part of the same Web page or to another Web page.

Hypertext Markup Language (HTML) The main markup language used to create Web pages; HTML defines the format and layout of a Web document.

Hypertext Transfer Protocol (HTTP) The underlying protocol for the Web.

Internet Often referred to as the Net; a huge global interconnection of computer networks around the world.

Internet service provider An organization or company that provides connectivity to the Internet through a telecommunications line or wireless system.

portal A Web site that features useful content but also contains links to other sites.

streaming A technique for transferring data in a steady and continuous stream so you can start displaying the data before the transmission is completed.

subdomain A domain that is part of a larger domain and is dependent on the larger domain.

Uniform Resource Locator (URL) Often referred to as a Web address; identifies the unique IP address.

Web apps Online applications that host programs you can access with your Web browser.

Web browser A software program you use to view and retrieve documents from the Web and to display the documents in a readable format.

Web site A Web page or a collection of related Web pages located on the Web.

Wi-Fi Uses radio waves to provide wireless high-speed Internet and network connections.

wiki A collaborative Web site that people can use to add, edit, remove, and organize Web page content.

World Wide Web Often referred to as the Web and abbreviated as WWW or W3; a global collection of interconnected documents (Web pages) and other resources.

Web content

Living Online

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Boolean logic search Uses three primary logical operators AND, OR, and NOT to define the search.

Copyright -The exclusive right, granted by law for a certain number of years, to make and use literary, musical, or artistic work.

Intellectual Property- The recognition of the ownership of rights to literary, musical, or artistic work.

Keywords- Words that describe the information the user is trying to locate.

Knowledge base- A collection of data related to a specific subject.

Meta tab- An HTML coding statement that describes some aspect of the Web page content.

Metasearch engine-Sends queries to several other search engines.

Plagiarism-Claiming someone else's words as your own.

Public domain- The literary, musical, or artistic work is available for anyone to copy or use.

Related Search- Preprogrammed queries or questions suggested by the search engine that often lead to other Web pages containing similar information.

Search Directory- Also referred to as a Web directory; a collection of Web sites organized by category, and then often further organized by geographic region.

Search Engine- A program that searches documents for specified keywords and then provides a list of the sources where the keywords were found.

Spiders- Also called Webcrawlers; automated software applications that use an algorithm to search Web sites for relevant information.

Stemming-When you search for a word, the search engine also searches for the root forms of the keywords, so the search results include additional variations of the keywords.

Trademark- The exclusive right to visual or commercial images.

Web directory- Also referred to as a search directory; a collection of Web sites organized by category, and then often further organized by geographic region.

Webcrawlers- Also called spiders; automated software applications that use an algorithm to search Web sites for relevant information.

Technology and Society

Assistive technologies Software and devices used to maintain, increase, or improve the functional capabilities of individuals with disabilities.

business-to-business (B2B) Describes e-commerce transactions between businesses, such as between a company and a supplier.

business-to-consumer (B2C) Describes online transactions between businesses and consumers.

business-to-government (B2G) Describes online transactions between businesses and governmental agencies.

critical thinking The process of analyzing, combining information, and evaluating information as a guide to making judgments.

crowdsourcing Combines the collective effort of many people to complete a task; needed services and ideas are solicited from an online community instead of from employees or suppliers.

e-commerce (electronic commerce) Conducting business on the Internet.

point-of-sale (POS) system A terminal used for electronic processing of payment transactions in a retail outlet.

telecommuting Using communications technology to keep the employee connected to the office.

Computer Safety and Ethics

Application Service Provider (ASP) Provides remote access to software hosted on the Cloud.

Cookie- A small text file that a Web server puts on your computer to store information about you and your preferences.

digital certificate An electronic document that verifies the identity of a person or company and confirms that they own a public key.

Filtering-Used to block content coming into and going out to the Internet.

Firewall-Protects against unwanted access or use to or from a network based on the specified security criteria.

Freeware- Programs that allow you to download and use the software at no cost, or for a voluntary fee.

Hardware- firewall Protects against unwanted access or use, to or from all the computers in a network from one point.

Internet censorship The suppression of Web content that is considered offensive or a threat to security.

Keylogger- A malicious program that records keystrokes.

Logic bomb- A virus triggered by the appearance or disappearance of specified data.

Malware- Any software that is designed to cause damage to a single computer, server, or computer network.

Open source- Software in which the source code is available free of charge to the general public for use and/or modification.

Phishing- A fraudulent attempt to steal personal information to commit identity theft.

Public domain software- Software that belongs to the public, so the software licensing has no restrictions.

Secure Sockets Layer (SSL)- Technology that encrypts sensitive information and authenticate servers and clients to ensure a secure connection.

Shareware Programs- that are initially available for free trial for a specified period of time the license generally requires that users pay a fee for continued use.

Software as a Service (SaaS)- Provides remote access to software hosted on the Cloud.

Software Piracy- Unlawful reproduction and/or distribution of any copyrighted digital files including videos, music, e-books, and software.

Spyware Software-fraudulently installed on a personal computer.

Time Bomb- A virus that does not cause damage until a specified date or until the system has been launched a certain number of times.

Transport Layer Security (TLS)- Technology that encrypts sensitive information and authenticate servers and clients to ensure a secure connection.

Trojan horse- A virus that does something different from what it is expected to do. It may look like it is performing one task while it is actually performing an opposite task (usually something disastrous).

Two-step verification- Require more information than a password to authenticate your identity.

Virus- A program that has been written, usually by a hacker, to corrupt data on a computer.

Worm- A virus that makes many copies of itself, consuming system resources so that the computer slows down or actually halts tasks.

Topic: Communication Networks and the Internet

Duration: 2 Week(s)

Living Online

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How does knowing the meaning of a network and the benefits affect your education?

Learning Targets

Students will understand network fundamentals

Topic: Electronic Communication and Collaboration

Duration: 2 Week(s)

Topical Essential Question(s) Covered

How will you communicate effectively using different types of collaborative tools to various audiences and then trouble-shoot common problems?

Learning Targets

Students will apply effective forms of electronic communication and collaboration.

Topic: Using the Internet and the World Wide Web

Duration: 2 Week(s)

Topical Essential Question(s) Covered

How does identifying and navigating information on the internet, World Wide Web, and elements of a web page enhance your ability to validate online resources?

Learning Targets

Students will explore the Internet and the Web using a browser.

Students will search and show respect for Internet content

Topic: Web Content & Computer Safety & Ethics

Duration: 2 Week(s)

Topical Essential Question(s) Covered

Do you understand how your online behavior affects your personal safety, and whether or not it is ethical and legal?

Learning Targets

Students will understand how to maintain a safe computing environment.

Students will understand how to use the Internet safely and ethically.

Topic: Real world project

Duration: Ongoing

Topical Essential Question(s) Covered

How can you apply your knowledge and skills for computer technology to solve a real world problem? Show your knowledge on how technology and online computer applications maximize your ability to communicate, collaborate, and think critically and socially online.

Learning Targets

Students will work collaboratively to complete a project that solves a real world problem

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Project

Living Online

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Exploring Engineering Technology

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Course Description

This course offers an overall view of exploring technology, from an engineering basis, and how it impacts daily life and societal norms.

Timeframe	Unit	Scope And Sequence Instructional Topics
13 Hour(s)	Exploring Technology: Meet Technology	1. Technology To The Rescue 2. System Design: What Every Technology Needs 3. Transforming Resources Into Technology: From Production To You
14 Hour(s)	Exploring Technology: Practicing Design	1. The Role of Problem Solving 2. Design: It's A Process 3. Communicating Ideas Graphically
7 Hour(s)	Exploring Technology: Project Revive: Revitalizing Communities Using Existing Models	1. Community Related Environmental Problems and Technology

Materials and Resources

- 2 Separate Work Areas (Computer lab with Internet access and an open lab with tables and access to tools)
- Auto Desk Suite
- resource books: text and reference materials
- Projector
- Rulers
- Tools for disassembly, i.e., small screwdrivers, X-Acto knives, etc.
- Safety equipment, i.e., safety glasses, gloves, cutting mats as needed
- Clipboards to aid students in conducting surveys.
- Engineering Design Journals
- Blank paper for sketching
- Art materials such as paper, markers, paint, etc.

Prerequisites

None

Course Details

Unit: Exploring Technology: Meet Technology

Duration: 13 Hour(s)

Overarching Essential Question(s) Covered

How does technology meet human needs and wants?

Topic: Technology To The Rescue

Duration: 5 Hour(s)

Topical Essential Question(s) Covered

How does technology address our current wants and needs?

Learning Targets

Identify why humans develop technology to meet individual needs and wants.

Utilize creativity to develop technology to meet a need or want in order to have a better understanding of its need in the design of technology.

Analyze and explain how science, mathematics, and history ensure that technology is developed with more precision and accuracy in meeting the needs of individuals.

Develop presentations to demonstrate how technology has been modified to meet the demands of society, industry and/or individuals.

Topic: System Design: What Every Technology Needs

Duration: 3 Hour(s)

Topical Essential Question(s) Covered

How do multiple facets of technology effect creative design?

Learning Targets

Identify how technologies are interdependent.

Explain the four essential elements of a four part, closed loop system.

Analyze how different technologies depend on similar and different sets of processes.

Demonstrate and explain how the quality of technology is often a result of the integrity of the system and the resources used in the process.

Exploring Engineering Technology

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits

Required Course

Topic: Transforming Resources Into Technology: From Production To You

Duration: 5 Hour(s)

Topical Essential Question(s) Covered

How does selecting the appropriate resource affect the desired result of technology being designed?

Learning Targets

Explain how all technologies depend on manufacturing technologies.

Identify the difference between durable and non-durable goods such as clothing, medicines, and processed foods.

Analyze how teaming is similar to how technology needs to be developed and used with consideration of ethical issues.

Unit: Exploring Technology: Practicing Design

Duration: 14 Hour(s)

Overarching Essential Question(s) Covered

How does the role of problem solving effect its process to communicate ideas?

Topic: The Role of Problem Solving

Duration: 4 Hour(s)

Topical Essential Question(s) Covered

How does technology effect problem solving?

Learning Targets

Examine how technology is developed to solve problems as a result of demands, values, and interests of consumers and businesses.

Identify how various technology such as transportation technologies, agricultural/biotechnology, and communication technology may be developed with economic concerns considered more than environmental and/or long-term impacts.

Find solutions through use of experimentation to solve technological problems which has often been an essential useful strategy in scientific research.

Topic: Design: It's A Process

Duration: 3 Hour(s)

Topical Essential Question(s) Covered

How does using the Engineering Design Process (EDP) maximize and find the best solution?

Learning Targets

Use an engineering design journal to document all phases of the design process.

Develop abilities to use the engineering design process.

Understand that despite our best efforts to use engineering design principles correctly, sometimes the results are not perfect.

Topic: Communicating Ideas Graphically

Duration: 7 Hour(s)

Topical Essential Question(s) Covered

How does transferring ideas from EDP to graphic designs complete the design process?

Learning Targets

Utilize tools such as computer aided design software and other modeling tools to provide two-dimensional and three-dimensional representations of technology innovations/solutions

Measure precisely using given mathematics skills.

Sketch a design solution to insure the integrity of the original design and allow for the most accurate manufacturing.

Unit: Exploring Technology: Project Revive: Revitalizing Communities Using Existing Models

Duration: 7 Hour(s)

Overarching Essential Question(s) Covered

How can using a combination of the EDP and technology develop ideas to revitalize communities?

Topic: Community Related Environmental Problems and Technology

Duration: 7 Hour(s)

Exploring Engineering Technology

Career/Tech

Grade(s) 6th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How are needs best met using the EDP and problem solving techniques?

Learning Targets

Examine how communities often must be re-developed due to not only natural disasters but also human-made disasters or problems which often impacts humans' attitudes and choices about technology's development.

Determine whether new technologies need to be developed or if modifying existing products would be the best alternative/solution.

Utilize various tools to help gather data to evaluation the positive and negative effects of current technologies that may need modification

Analyze the data collected regarding the extent of the disaster using a variety of communication technologies such as remote sensing, gps, data tables using with spreadsheets, databases, graphs and charts.

Interpret by evaluation if the information obtained is accurate and useful for the purpose of determining various impacts of the disaster. (How much clean up needed, how many shelters, which tools are needed for repair...).

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Course Description

This exploration course provides the opportunity to learn non-farming concepts in the agriculture industry to serve as a foundation for future courses and to inform students about the industry that is so vital to society and to their future. Major units of instruction include an introduction to the agricultural industry, agribusiness, animal science, plant and horticulture science, environmental science, and leadership and personal development. Participation in FFA student organization activities is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Timeframe	Unit	Scope And Sequence Instructional Topics
4 Day(s)	Agriculture Industry Exploration	1. Defining the Agriculture Industry 2. Careers in Agriculture
8 Day(s)	Plant & Horticultural Science	1. Parts of a Plant & Classification 2. Plant Propagation 3. Plant Biotechnology
12 Day(s)	Agribusiness	1. Marketing Ag products 2. Domestic & World Trade - Imports & Exports 3. Slater Farms - Presentations & Spreadsheets
9 Day(s)	Animal Science	1. Classifying Animals 2. Exploring Companion Animals 3. Exploring Animal Digestive Systems 4. Exploring Large Animals
9 Day(s)	Environmental Science	1. Renewable Resources

Course Details

Unit: Agriculture Industry Exploration

Duration: 4 Day(s)

Overarching Essential Question(s) Covered

How does the agricultural industry support our nations economy?

Topic: Defining the Agriculture Industry

Duration: 2 Day(s)

Topical Essential Question(s) Covered

How do the non-farm and farming components of agriculture interact and help benefit society.

Topical Vocabulary

Agriculture
Biology
Commodity
Export
Import
Science

Topical Resources

Copies of student worksheets
Indiana Farm Bureau Soybean Kit (available for loan from many different Farm Bureaus)
Different colored pens or pencils (four different colors)
Internet access or ingredient lists on various products

Learning Targets

- 1 Describe how agriculture supports daily life.
- 2 Explain that agriculture is a science.
- 3 Discuss the uses of plants.
- 4 Discuss the uses of animals.
- 5 Describe how agricultural products are traded around the globe.

Topic: Careers in Agriculture

Duration: 2 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How are the non farm and farming components interact with each other to make up the overall agriculture industry.

Topical Vocabulary

Communicators
Educators
Producers
Researchers
Scientists
Service jobs

Topical Resources

Copies of student worksheets
Internet access
Chips, squares of colored paper, or corn kernels to use as markers for the Career Bingo Worksheet
Scissors
Glue

Learning Targets

- 1 Explain the major career areas in the agriculture industry.
- 2 Identify what it takes to be successful in an agricultural career.

Unit: Plant & Horticultural Science

Duration: 8 Day(s)

Topic: Parts of a Plant & Classification

Duration: 4 Day(s)

Topical Essential Question(s) Covered

What role do plants play in our society?

Topical Vocabulary

Flower
Fruit
Leaf
Root
Seed
Stem
Stamen
Stigma
Style
Anther
Filament
Pistil
Sepals

Topical Resources

Copies of student worksheets
Plant Materials
Plant Press Materials
Rag Mounting paper
Pruners

Learning Targets

- Identify the parts of a plant.
Understand the function of each plant part.
Identify the plant parts that are used for human consumption.

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topic: Plant Propagation

Duration: 3 Day(s)

Topical Essential Question(s) Covered

How do plants reproduce?

Topical Vocabulary

Dormant

Germination

Node

Plant cutting

Plant propagation

Asexual Reproduction

Grafting

Cotyledon

Topical Resources

Copies of student worksheets

Several different potted plants

Nursery catalogs

3 × 5 index cards

Plant Cutting Materials

Rooting Hormone

floral foam

Ziploc bags

corn & bean seeds

mature bean plants

Learning Targets

Define plant propagation.

Describe seed germination and the proper conditions for it.

Describe three types of plant cuttings.

Topic: Plant Biotechnology

Duration: 3 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How is modern technology affecting the plant science industry?

Topical Vocabulary

Biotechnology
Bovine somatotropin (bST)
Bt corn
DNA
Dominant gene
Double helix
Gene
Genetic code
Recessive gene

Topical Resources

Copies of student worksheets
Apple
Knife
Milk
Cereal
Tofu
Various supplies listed in WS-B and WS-C
DNA Lab - pipe cleaners, 4 colors of pony beads, salt water,
test tubes, soap, ethanol, teaspoon

Learning Targets

Describe how biotechnology directly affects the lives of humans.
Explain how DNA influences the ways that people, animals, and plants grow.
Explain how biotechnology is applied in agriculture.

Unit: Agribusiness

Duration: 12 Day(s)

Overarching Essential Question(s) Covered

What business tools are used in the agribusiness industry?

Topic: Marketing Ag products

Duration: 3 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

What strategies are used to effectively market products to consumers?

Topical Vocabulary

Advertise
Assembling
Direct market
Distributing
Free enterprise
Grading
Marketing
Marketing plan
Market research
Motive
Patronage
Processing
Promoting
Retail market
Sales forecast
Sales history
Safety testing
Target market
Wholesale market

Topical Resources

Copies of student worksheets
Magazines with advertisements

Learning Targets

Define marketing process
Outline the steps in the marketing process
Explain the research and development of a product

Topic: Domestic & World Trade - Imports & Exports

Duration: 3 Day(s)

Topical Essential Question(s) Covered

How does agriculture impact the food supply in the world.

Topical Vocabulary

Commodity
Ticker
Options
Contract
Put
Call

Topical Resources

Internet Access
M&M's
World Maps

Learning Targets

Identify major import and export agriculture products
Compare and contrast Board of Trade versus Stock Market
Identify commodities traded on the Chicago Board Options Exchange

Topic: Slater Farms - Presentations & Spreadsheets

Duration: 6 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How do business office skills intertwine within an agribusiness?

Topical Vocabulary

Balance Sheet
Income Statement
Budget
Agrotainment

Topical Resources

Slater Farms Curriculum kit
Internet access
copies of student worksheets

Learning Targets

Identify various spreadsheet applications such as balance sheet, scheduling, and data chart for given business scenarios

Identify various presentation applications such as brochure, websites, advertisements, camtasia, etc. for given business scenarios

Unit: Animal Science

Duration: 9 Day(s)

Overarching Essential Question(s) Covered

How do large and small animals impact society?

Topic: Classifying Animals

Duration: 2 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How are groups of animals organized and named?

Topical Vocabulary

Barrow
Boar
Breed
Bull
Calf
Chick
Cockerel
Cow
Crossbreed
Ewe
Ewe lamb
Farrowing
Gilt
Heifer
Hen
Lamb
Piglet
Polled
Pullet
Ram
Roan
Rooster
Sow
Steer
Wether

Topical Resources

Copies of student worksheet
Internet access

Learning Targets

Explain the terms used to identify different animals within livestock species.

Topic: Exploring Companion Animals

Duration: 3 Day(s)

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Vocabulary

Angora fur
Bitch
Buck
Carnivore
Companion animal
Declawed
Doe
Hairball
Herding dog
Hound
Kindling
Kitten
Litter
Monogastric
Non-sporting breed
Normal fur
Puppy
Queen
Rex fur
Satin fur
Sporting dog
Stud dog
Terrier
Tomcat
Toy breed
Whelping
Working dog

Topical Resources

Copies of student worksheets

Learning Targets

- 1 Name some types of companion animals and how they benefit humans.
- 2 List important characteristics of dogs.
- 3 Define terminology and care of cats.
- 4 Describe important concepts in keeping rabbits.

Topic: Exploring Animal Digestive Systems

Duration: 2 Day(s)

Topical Essential Question(s) Covered

How does a diet affect the animal's digestive physiology?

Topical Vocabulary

Rumen
Reticulum
Omasum
Abomasum
Small Intestine
Large Intestine
Cecum
Esophagus

Topical Resources

Copies of student worksheet
Internet access

Learning Targets

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Explain the differences between digestive systems.

Topic: Exploring Large Animals

Duration: 2 Day(s)

Topical Essential Question(s) Covered

How do large animals benefit society?

Topical Vocabulary

Curds
Homogenization
Lumens
Pasteurized
Silage
Teat
Udder
Whey

Topical Resources

Copies of student worksheets
Illinois Dairy Magic Kit - Illinois Farm Bureau

Learning Targets

Understand the anatomy of dairy cattle and how they produce milk.
Explain how milk is processed for human consumption.
Describe dairy products and how they are made.

Unit: Environmental Science

Duration: 9 Day(s)

Overarching Essential Question(s) Covered

What are the affects of alternative energy sources.

Topic: Renewable Resources

Duration: 9 Day(s)

Topical Essential Question(s) Covered

What drives which renewable resources are used?

Topical Vocabulary

Biodegradable
Nonrenewable resource
Renewable resource

Topical Resources

Copies of student worksheets
Piece of candy for each student
plastic cups, pencils, string, tape, cardstock,
weighted object
solar panels, mini motors, balsa wood

Learning Targets

Identify wind & solar energy alternatives and calculate the wind power formula.
Describe the difference between renewable and nonrenewable resources.
Recognize substitution possibilities of renewable resources, such as corn and soybeans, for nonrenewable resources.

Agricultural Science

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits

Required Course

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Course Description

The seventh grade program features age-appropriate, theme-orientated lesson plans based on the ISBE Career cluster framework, to be used in the classroom to guide students through career exploration. Mycaert provides specific lesson plans, activities and assessments related to career exploration and career readiness. Learning for Life incorporates an action-learn process and uses techniques such as role playing, small group discussions and scenario analysis. There are lesson plans that will be conducted by a teacher with guest speakers, community role models, and business leaders, along with field trips to various businesses. During the career exploration lesson plans the students engage critical thinking.

Timeframe	Unit	Scope And Sequence
		Instructional Topics
Ongoing	Career Self Assessment	1. Knowledge and skills necessary for a career.
Ongoing	Researching Careers	1. Planning for a career in ???
Ongoing	Behaviors and Attitudes	1. Ethics in the workplace 2. Setting Personal Goals
Ongoing	Resume Writing	1. Creating a resume

Materials and Resources

Career Text Book-Investigating your Career
Careercruising.com
Learningforlife.com
Overhead projector
Smart board
Guest Speakers
Computers or chrome books for each student
Transportation for visiting workplaces

Prerequisites

Computer skills for research and Careercruising
Reading, writing, speaking and listening.

Course Details

Unit: Career Self Assessment

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Overarching Essential Question(s) Covered

How can the choice of a particular career affect your lifestyle?
What are my interests and abilities?

Textbook/Materials/Resources

Textbook
Computers available to all students in the classroom daily.
Careers worksheets
Transportation to learning sites
Guest speakers.
White board
Powerpoints
Career cruising
Access to ISBE web page
Learning for life curriculum online
Teacher Tube interview videos

Academic Vocabulary

Careers
Analyze
Discuss
Compare
Explain
Compile
Require
Outlook
Research
Develop
Construct
Predict
Research
Describe

Content Specific Vocabulary

Global
Aptitudes
Personal
Abilities
Personal skills
Personal abilities.
Attitude
Initiative,
Punctuality,
Responsibility
Dependability
Honesty
Self esteem
enthusiasm
success

Assessments

Completion of learning styles worksheet
Completion of career guidance worksheet
Access and CareerCruising
Access the ISBE career cluster website
Students will complete career guidance and skills assessments that will be used as guides in the selection of a career.

Cross Curricular Opportunities

Language Arts, math, technology, FACS, social studies, world history, current events.

Topic: Knowledge and skills necessary for a career.

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

- What skill sets are necessary for employment?
- What type of knowledge is necessary for employment?
- What is the difference between a job and a career?
- What are transferable skills?

Topical Vocabulary

- Skills
- Abilities
- Knowledge
- Communication
- Research and Planning
- Human Relations
- Organization
- Management
- Leadership
- Work survival
- Blue collar
- Career cluster
- Career plan
- Occupation
- Talents
- Transferable skills
- Skill sets
- Professional
- Passion

Topical Resources

- Learning for Life Career Exploring
- [www.careercruising](http://www.careercruising.com)
- Internet access
- Computer for each student
- Printer
- DVD's
- online resources

Topical Assessments

- My skills worksheets (from Learning for Life Career Exploring)
- Research volunteer opportunities in your school and your community.
- Write a letter to the head of a group or organization asking for information on volunteer opportunities.
- After the above information is received follow up with a thank-you note.

Learning Targets

- Students will investigate areas of interest that will be used as guidelines in the selection of a career.
- Students will identify online and printed sources of information about jobs, careers, and entrepreneurship.
- Students will compare personal skills and interest to various careers.
- Students will evaluate actions taken and make appropriate modifications to personal goals.
- Students will describe personal values.
- Students will assess individual strengths and weaknesses in planning.
- Students will work independently and in group settings to accomplish a task.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

- Students will identify their personal skills and abilities to help them choose a career.
- Students will explore various career interests/options.
- Students will describe personal values.
- Students will assess personal value.
- Students will identify the skills required for various careers.
- Students will demonstrate employability skills for a specific career.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Unit: Researching Careers

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Overarching Essential Question(s) Covered

- How does a person find information on careers?
- What training or education will I need to have in order to work in the career field of my choosing?
- How do I get from where I am to where I want to be?

Textbook/Materials/Resources

- Textbook-Investigating Your Career
- Learning for Life Career Exploring
- Computers for research
- Guest speakers
- Transportation to various locations

Academic Vocabulary

- Motivation
- Influence
- Decision-making
- Skill sets
- Volunteering
- Interests
- Hobbies
- Talents
- Abilities

Content Specific Vocabulary

- Task analysis
- Human Resource Management
- Job prerequisites
- Occupational competencies

Assessments

- www.careercruising
- Interview an influential person in your life (about their job).
- Present interview to class.

Cross Curricular Opportunities

- Social Studies
- Language Arts
- Technology
- Life skills

Topic: Planning for a career in ???

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

How do I find information on careers I may be interested in?
What training or education will I need to have in order to work in the career field of my choice?
How do I get from where I am to where I want to be?

Topical Vocabulary

Apprenticeship
Internship
Cooperative program
Advanced Education
Associate Degree
Bachelor Degree
Communication style
Entrepreneur
Job-sharing
Electives
Workforce trends
Career Fair
Job shadowing
Career Day
Interview
Informational interview

Topical Resources

Guest speakers
www.careercruising.com
Learning for life
Computers for each student
Internet access
Printer
DVD's
online resources

Topical Assessments

Students will complete a career development plan based upon the career cluster indicated by their skills and interest assessments.
Quiz on information provided by the guest speakers.

Learning Targets

Students will identify personal strengths and abilities to aid them in career choice.
Students will explore various career opportunities and determine whether or not their interests and abilities apply.
Students will share their findings with others.
Students will identify the skills required for various careers.
Students will explore various career interest/options.
Students will describe personal values
Students will perform tasks with integrity.
Students will conduct a self-evaluation for personal reactions to new experiences.
Students will identify individuals who could provide a positive job reference.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Unit: Behaviors and Attitudes

Duration: Ongoing

Overarching Essential Question(s) Covered

Now that I have a job, how do I keep it?

Textbook/Materials/Resources

Careers textbook
Computers for each student
Worksheets
Career Cruising
Whiteboard
Chalkboard
Learning life

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Academic Vocabulary

Enjoyment
Respect
Appreciate
Opportunities
Environment
Work Values
Interacting with people
Creativity
Challenges
Solutions
Employment outlook
Workplace and workforce trends
Goals
Motivation
Appearance

Content Specific Vocabulary

Work place diversity
Discrimination
Non-traditional career
Demographics
Personality traits
Reasonable accommodations
Equity
Occupations
Lifelong learning
Work place behaviors
Job sharing
Self motivation
Time management
Ethics
Goal setting
Timelines
Strategies
Ambition
Influence
Priorities
Scheduling
Enthusiasm
Procrastination
Backup plan
Self starter
Controlling your behavior
Wants and needs
Mentor
Career
Career cluster
Career Portfolio
Short term goals
Long term goals
Employer
Employee
*P*A*T*H to Success (passion, attitude, talents, heart)

Assessments

Ten Ways I Can Work Better With My Boss worksheet. (from Learning for Life Career Exploring)
How to work with your boss worksheet. (from Learning for Life Career Exploring)
What Would You Do worksheet (from Learning for Life Career Exploring)
Ethics Journal worksheet (from Learning for Life Career Exploring)

Cross Curricular Opportunities

Technology, Language Arts, Social Studies, Life Skills

Topic: Ethics in the workplace

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

- What are ethics?
- What are some ethical issues?
- Why are ethics important in the work place?

Topical Vocabulary

- Pro's and Con's
- Honesty
- Cheating
- Morals
- Values
- Adapting
- Interacting
- Management
- Guidance
- Trend
- Collaboration
- Teamwork
- Solutions
- Empowerment
- Etiquette
- Cultural norm
- Corporate culture
- Trustworthy
- Respect
- Energetic
- Attitude
- Responsibility
- Positive thinking
- Managing social media
- Characteristics
- Communication

Topical Resources

- Investigating your career
- Powerpoint
- Guest speaker
- Internet access
- Computers for each student
- Printer
- DVD's
- online resources

Topical Assessments

- What would you do? activity & quiz

Learning Targets

- Students will make decisions based on different career scenarios.
- Students will identify the skills needed to develop a professional relationship.
- Students will demonstrate respect for others.
- Students will explain the benefits of mutual respect.
- Students will demonstrate the benefits of living by positive values.
- Students will determine human relation skills characteristics of people who exhibit compassion, empathy, unselfishness, trustworthiness, reliability and being friendly.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Setting Personal Goals

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

What are some goals you need to complete your career plan?
What is your career dream?
How could you accomplish that dream?

Topical Vocabulary

Self-Motivation
Procrastinate
Action Plans
Time Management
Personal Appearance
Office Etiquette
Short-term goals
Long-term goals
Medium-term goals
Strategies
Timelines
Goals
Optimist
Strategies
Realistic
Challenging
Positive
Measurable
Action Plan
Roadblocks
Backup plan
Mentor
P*A*T*H to Success (passion, attitude, talents, and heart)
Trends
Career Fair
Prioritize
Achieve
Scheduling
Time wasters
Distractions
Influence
Dress Code
Casual Wear
Business Casual
Business Professional
Business Formal
Casual
Uniform
Body Language
Nonverbal communication
proactive
reactive

Topical Resources

Text Book-Investigating Your Career
Learning for Life Career Exploring
Motivational Speaker
Computers for research
Mycaert
Internet access
Printer
DVD's
online resources

Topical Assessments

Dress for Success worksheet (from Learning for Life Career Exploring)
Appropriate Clothing for the Workplace worksheet (from Learning for Life Career Exploring)
Defend the need for a dress code or the lack of dress code in certain businesses and present to class.
Inappropriate Behaviors worksheet. (from Learning for Life Career Exploring)
Correcting Behavior worksheet. (from Learning for Life Career Exploring)
Becoming a Proactive worker activity. (from Learning for Life Career Exploring)
Guess My Emotion activity (from Learning for Life Career Exploring)

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Learning Targets

- Students will explore personal goals to help in the decision making process of a career.
- Students will identify individuals who could provide a positive job reference.
- Students will give an example of how education and/or training can affect lifetime income.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Unit: Resume Writing

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Overarching Essential Question(s) Covered

- What are my personal strengths?
- Which personal interests and skills relate to your career choice?
- Which personal interest and skills relate to your career goals?

Textbook/Materials/Resources

- Text Book-Investigating Your Career
- Learning for Life Career Exploring
- www.careercruising
- Computers for research
- Guest speaker

Academic Vocabulary

- Self-confidence
- Dedication
- Communication
- Experience
- Objective
- Guidelines
- Careers
- Analyze
- Discuss
- Compare
- Explain
- Compile
- Require
- Outlook
- Research
- Develop
- Construct
- Predict

Content Specific Vocabulary

- Resume
- Job Application
- References
- Cover Letter
- Written documentation
- Portfolio
- Certification
- Degree
- Applicant
- Professional
- Personal Fact Sheet
- Educational Background
- Personal Information
- Job Objective
- Related Experience
- Workplace Skills
- Honors and Activities
- References
- Certification
- Diploma
- Degree
- Internships
- Volunteer
- Work/Service-Learning Projects
- Chronological resume
- Career Fair

Assessments

- Complete Personal Resume
- Personal Survey worksheet (from Learning for Life Career Exploration)
- Resume Template worksheet (from Learning for Life Career Exploration)

Cross Curricular Opportunities

- Language Arts, Technology, Life Skills

Topic: Creating a resume

Duration: Ongoing

Career Exploration

Career/Tech

Grade(s) 7th, Duration 1 Quarter, .25 Credits
Required Course

Topical Essential Question(s) Covered

- How would you describe yourself?
- What type of job are you interested in?
- What are your skills and abilities?
- What extracurricular activities are you involved in?
- What activities and organizations do you participate in outside of school?

Topical Vocabulary

- Careers
- Analyze
- Discuss
- Compare
- Explain
- Compile
- Require
- Research
- Develop
- Construct
- Predict
- List

Topical Resources

- Learning for Life Career Exploring
- Computers for research
- Sample Resumes
- Mycaert
- Textbook-Investigating Your Career
- Internet access
- Printer
- DVD's
- online resources

Topical Assessments

- Completed Resume

Learning Targets

- Students will develop a list of skills, abilities, talents, and awards about themselves.
- Students will list in chronological order past experiences relevant to their career choice.
- Students will create a resume.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Completed resume

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Course Description

Technology is ever-changing and always adapting. In fact, the tech that students currently use in day-to-day life will become obsolete by the time they enter the workforce. Is this a problem? Not if they are prepared. That is where Career Technology Education (CTE) enters the picture. Throughout the course of the CTE Capstone, students will learn how technology will adapt to, and interact with, career strands in the future.

In preparation for freshman level coursework, students will plan, design and develop a fully functioning structure from the ground up. While doing so, they will research and implement technologies and concepts from all five CTE career strands: Engineering, Business, Agriculture Science, Family Consumer Science, Health Occupations.

Scope And Sequence		
Timeframe	Unit	Instructional Topics
Ongoing	Engineering	1. Reading a Floor Plan 2. Building A Floor Plan Using Auto Desk CADD 3. Basic Building Code 4. Calculate Material Cost 5. 3D Scale Model
Ongoing	Business	1. Business Concepts and Communication
Ongoing	Agricultural Science	1. Evaluating the Geothermal Industry 2. Evaluating the Solar & Wind Industry 3. Landscape Architecture
Ongoing	Health Occupations/Family and Consumer Science	1. Health Occupations 2. Environmental Health and Safety 3. Safety and Sanitation 4. Using energy efficiently 5. Universal design
Ongoing	Nutrition and Healthy Alternatives	1. Reading and Understanding Nutrition Labels

Materials and Resources

- 2 Separate Workspaces (Computer Lab & Lab With Access To Tools And Workspace)
- Auto Desk Suite
- Finances to upgrade computer lab so the workstations can run Auto Desk Suite
- Projector
- Speakers
- Finances For Field Trips (To Get A Look At CTE In Practice)
- SchoolVue
- DVD's
- MyCaert
- Finances To Purchase Lab Materials

Prerequisites

None

Course Details

Unit: Engineering

Duration: Ongoing

Overarching Essential Question(s) Covered

How does the Engineering Design Process (EDP) relate to the Civil Engineering collaborative environment/workplace?

Academic Vocabulary

- Scale
- Symbols

Content Specific Vocabulary

- Interior/Exterior Walls
- Windows
- Doors
- Line Type
- Layer
- Dimensions
- Building Code
- List of Materials
- Floor Plan
- Layout
- Entryway

Topic: Reading a Floor Plan

Duration: Ongoing

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Topical Essential Question(s) Covered

What basic knowledge is necessary to read a floor plan?

Learning Targets

Identify specific line types and weights.

Locate and size appropriate symbols.

Locate and utilize proper dimensions and dimensioning techniques.

Create and identify materials list.

Topic: Building A Floor Plan Using Auto Desk CADD

Duration: Ongoing

Topical Essential Question(s) Covered

How do you create a floor plan using Auto Desk CADD drawing techniques?

Learning Targets

Plan and draw a rough sketch.

Draw a floor plan.

Organize content by layer, line type and symbol.

Consider importing symbols and proper placement.

Address room construction and the design process.

Topic: Basic Building Code

Duration: Ongoing

Topical Essential Question(s) Covered

How do you find and apply building codes to a floor plan?

Learning Targets

Understand and apply basic door code.

Understand and apply basic window code.

Understand and apply basic wall and framing code.

Topic: Calculate Material Cost

Duration: Ongoing

Topical Essential Question(s) Covered

How do you calculate material cost?

Learning Targets

Define the materials needed.

Research the cost of materials.

Research basic labor cost for construction.

Address amount of product to buy.

Finalize and calculate material cost.

Topic: 3D Scale Model

Duration: Ongoing

Topical Essential Question(s) Covered

How does a 3D scale model of a building relate to its floorplan?

Learning Targets

Construct dimensional analysis.

Construct walls, joists, rafters and base.

Assemble scale model.

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Unit: Business

Duration: Ongoing

Overarching Essential Question(s) Covered

How do business skills enhance your ability to communicate effectively?

Academic Vocabulary

analyze, conclude, author's purpose, describe, resolution, dialogue, specific, meaning, determine, point of view, develop, author, compare, contrast, experience, viewing, perception, similarities, differences, accurate, detail, event, elaborate, explain, illustrate, individual, section, paragraph, graphics, headings, media, issue, information, summarize, evaluate, argument, evidence, valid, claim, presentation, perspective, facts, reasons, details, credible source, persuade, style, conclusion, transitions, audience, formal style, conclusion, introduction, formatting, selection, organization, analysis, setting, rising action, sequence, task, purpose, planning, editing, publish, keyboarding, medium, collaborate, interact, skills, key words, site source, internet search, research, project, inquiry, bibliography, digital source, credible, paraphrase, plagiarism, support, reflection, summary, edit, suggest, opinion, textual evidence, synonyms, antonyms, word choice, information, sequence, concrete details

Topic: Business Concepts and Communication

Duration: Ongoing

Topical Essential Question(s) Covered

What is the purpose of a business plan? How does this benefit you when working in a team environment?

Learning Targets

Students will develop a business plan.

Students will apply communication skills to enhance teamwork.

Students will understand how to develop leadership skills.

Students will apply basic math skills in a business environment.

Unit: Agricultural Science

Duration: Ongoing

Overarching Essential Question(s) Covered

How do energy systems effect our environment and economy?

Academic Vocabulary

Photovoltaic
Turbine
Passive System
Active System
Geothermal

Topic: Evaluating the Geothermal Industry

Duration: Ongoing

Topical Essential Question(s) Covered

What role does geothermal energy play in the "green" revolution?

Topical Vocabulary

geothermal, British Thermal Units, Passive Heating/Cooling,
Active Heating/Cooling

Learning Targets

Identify various geothermal application practices.

Compare and Contrast geothermal to conventional energy systems

Calculate energy usage and perform a cost benefit analysis

Topic: Evaluating the Solar & Wind Industry

Duration: Ongoing

Topical Essential Question(s) Covered

What role does solar and wind energy play in the "green" revolution?

Topical Vocabulary

turbine, photovoltaic cell, watts, volts, amps,
ohms

Learning Targets

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Identify various solar & wind application practices.
Compare and Contrast solar & wind to conventional energy systems
Assess energy transferred by using the wind power formula
Perform calculation to identify how much electrical energy is transferred

Topic: Landscape Architecture

Duration: Ongoing

Topical Essential Question(s) Covered

What role does plants and ground cover play in landscaping?

Topical Vocabulary

annuals, perennials, hardy zone, ground cover,
asymmetric, symmetric, partial shade, full shade, water holding capacity

Topical Resources

Landscape Architecture

Learning Targets

Identify various perennials & annuals that are suitable to our region.
Identify the basic rules in landscape architecture
Calculate cost of architecture plan

Unit: Health Occupations/Family and Consumer Science

Duration: Ongoing

Overarching Essential Question(s) Covered

How are Health Occupations and Family and Consumer Science used in a Design Process?

Textbook/Materials/Resources

DVD's
Computers or iPads for each student
Projectors
Field Trips
Community speakers

Academic Vocabulary

Analyze
Determine
Describe
Compare and Contrast
Interview
Define

Content Specific Vocabulary

Health Occupations (various)
Design process
Food
Nutrition
Environment Safety
Control

Assessments

Multiple choice quiz
Interview a person in Health Occupations

Cross Curricular Opportunities

Language Arts, Social studies, Technology, Math

Topic: Health Occupations

Duration: Ongoing

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Topical Essential Question(s) Covered

- What are health occupations?
- What types of health care facilities & the services provided by each?

Topical Vocabulary

- Various health occupations
- Safe environments
- Healthy environments
- Conservation
- Resources
- Energy efficient
- Protection
- Investigating
- Security.

Topical Resources

- DVD on Health occupations
- Community Speakers
- Field trips to various health occupational facilities
- Computers or iPads for research

Topical Assessments

- Research Health Careers in history and how they appear today.
- Interview someone in health occupations and present to the class.

Learning Targets

- Students will research health occupations related to the production and service in the food industry.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Group Work

- Students will analyze factors that contribute to maintaining safe and healthy school, work and community environments.
- Students will demonstrate management and conservation of resources for energy efficiency and protection of the environment.
- Students will design a system for documenting, investigating, and taking action on safety, security, and environmental issues.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Environmental Health and Safety

Duration: Ongoing

Topical Essential Question(s) Covered

- What is environmental health and safety?
- What environmental improvements have helped human life on earth?
- What are current environmental health concerns?

Topical Vocabulary

- Health hazards
- Environmental hazards
- Potential hazards
- Exposure
- Global
- Toxic
- Contaminants
- Sanitation
- Recycle

Topical Resources

- Field trip to various locations
- Computers for research for each student
- Speakers
- <http://www.neahin.org/health-safety/environmental/>
- <http://www.pbslearningmedia.org/resource/envh10.health.spls34/protect-your-health-and-environment/>

Topical Assessments

- <http://www.pbslearningmedia.org/resource/envh10.health.spls34/protect-your-health-and-environmenthttp://www.neahin.org/health-safety/environmental/iaq-tfs-lesson-plans-k-12.html>

Pre quiz and post quiz environmental safety.

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Learning Targets

Students will be introduced to healthy indoor environments.

Students will understand concepts related to indoor environments and determine sources of indoor pollution.

Knowledge Comprehension Analysis\Synthesis\Evaluation

Topic: Safety and Sanitation

Duration: Ongoing

Topical Essential Question(s) Covered

How can you ensure safety and prevent serious illness or even death during the flow of food?

What is the difference between clean and sanitary?

What are some food contaminants?

Topical Vocabulary

contamination

Safety

Sanitation

Industrial

Airborne illness

symptoms

Characteristics

Hygiene

Personal

Working conditions

Food industry

Topical Resources

Computers to research food contaminants

Topical Assessments

Quiz on Safety and Sanitation

Learning Targets

Students will define safety and sanitation

Students will analyze procedures for safety and sanitation in the workplace.

Students will explain personal hygiene in the workplace.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Students pick a State in the US and a foreign country to compare and contrast Safety and Sanitation standards and present their findings.

Presentation

Topic: Using energy efficiently

Duration: Ongoing

Topical Essential Question(s) Covered

What are some simple steps people can take to reduce energy use in the home or industry?

What is Energy Star?

What is resource management and how will it be more important in the future?

Topical Vocabulary

Resource management

Energy Efficient

Natural elements

Energy Star labels

EPA

Alternative Energy

Topical Resources

Computers to research energy equipment from different manufacturers.

Tour a manufacturing building

Speakers

Topical Assessments

Prequiz and post quiz

Group presentation of energy efficient equipment

Learning Targets

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Students will analyze different equipment and appliances for energy efficiency.

Students will be able to identify energy efficient equipment for industry.

Knowledge Comprehension Analysis\Synthesis\Evaluation

Topic: Universal design

Duration: Ongoing

Topical Essential Question(s) Covered

What is Universal Design?

How is it used in building?

Topical Vocabulary

Universal design

Functional interiors

Appliances

Disaster resistant buildings

Topical Resources

On-line lesson plans

Computer to research designs.

Topical Assessments

Research folder

Cost comparison sheet

Learning Targets

Students will understand the concept of universal design and how it applies to commercial interiors.

Students will research and evaluate resources needed to improve the working environment.

Students will research equipment and appliances and make a cost comparison sheet.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Notetaking

Group work

Cost Comparison sheet

Research

Unit: Nutrition and Healthy Alternatives

Duration: Ongoing

Overarching Essential Question(s) Covered

Why is it important to be aware of nutrition and healthy alternatives in the food industry?

Textbook/Materials/Resources

Nutrition DVD's

Worksheets.

Nutritionist speaker

Visit ECC Culinary Arts center

Academic Vocabulary

Research

Analyse

Compare

Contrast

Explore

Design

Content Specific Vocabulary

Nutrition, the six nutrients, American dietary guidelines, calories

Assessments

Prequiz,

Nutrition project

Cross Curricular Opportunities

Language arts

Social studies,

Math

Technology

Topic: Reading and Understanding Nutrition Labels

Duration: Ongoing

CTE Capstone

Career/Tech

Grade(s) 8th, Duration 1 Semester, .5 Credits
Required Course

Topical Essential Question(s) Covered

Why would it be important to understand food labels before preparing food for a group?
How should we incorporate food label reading into preparing food in industry?

Topical Vocabulary

Nutrition Labels
Calories
Sodium
Content
Serving Size
Servings per container
Recommended daily allowance
Percentages and daily allowance

Topical Resources

Computer or iPads for each student
Calculators
Worksheets
Powerpoint
DVD
Food labels for each student

Topical Assessments

Research and analyze restaurant or school nutrition labels.

Learning Targets

Students will determine if the food prep facilities have followed the safety and sanitation standards as laid out by the law.

Analysis\Synthesis\Evaluation

Students will research and analyze nutritional labels before preparing menus for a group.

Analysis\Synthesis\Evaluation

Computer Technology

Career/Tech

Grade(s) 8th, Duration 1 Semester
Elective Course

Course Description

Microsoft offers an IC3 certification exam, which includes three components: Online Living, Computing Fundamentals, and Key Applications. This course focuses on the Online Living certification, which utilizes Office (Microsoft Word, Excel, Outlook, file management, Internet searching, cloud computing, & trouble-shooting).

This course develops the skills toward IC3 certification to prepare students for lifelong learning in the 21st Century. Using business computer applications and other technologies, students will maximize their ability to communicate, collaborate, and think critically and socially online in a safe and ethical way. Additionally, students will apply these skills today necessary to advance their education, and employment opportunities that require fluency with these standardized programs.

Scope And Sequence

Timeframe	Unit	Instructional Topics
5 Week(s)	Computer Fundamentals	1. Exploring Computers Systems & Input, Output, and Processing 2. Computer Protection and Maintenance 3. Computer Related Issues & Software Hardware Interaction 4. Exploring Software Fundamentals 5. Windows Management & Operating System
13 Week(s)	Key Applications	1. Microsoft Word Processing 2. Microsoft Excel Spreadsheet 3. Microsoft PowerPoint Presentation 4. Microsoft Access/Database

Materials and Resources

1. Textbook (or latest version)
2. Software: all instructor and student online and desktop software necessary for training, assessing and projects; Microsoft Office (latest version); SchoolVue
3. Hardware: computer lab with necessary memory to run and operate the software; projector; screen

Prerequisites

None

Course Details

Unit: Computer Fundamentals

Duration: 5 Week(s)

Overarching Essential Question(s) Covered

How will students demonstrate their knowledge of computer fundamentals and business computer application skills necessary to advance their education, and employment opportunities that require fluency with these standardized programs?

Academic Vocabulary

analyze, conclude, author's purpose, describe, resolution, dialogue, specific, meaning, determine, point of view, develop, author, compare, contrast, experience, viewing, perception, similarities, differences, accurate, detail, event, elaborate, explain, illustrate, individual, section, paragraph, graphics, headings, media, issue, information, summarize, evaluate, argument, evidence, valid, claim, presentation, perspective, facts, reasons, details, credible source, persuade, style, conclusion, transitions, audience, formal style, conclusion, introduction, formatting, selection, organization, analysis, setting, rising action, sequence, task, purpose, planning, editing, publish, keyboarding, medium, collaborate, interact, skills, key words, site source, internet search, research, project, inquiry, bibliography, digital source, credible, paraphrase, plagiarism, support, reflection, summary, edit, suggest, opinion, textual evidence, synonyms, antonyms, word choice, information, sequence, concrete details

Computer Technology

Career/Tech

Grade(s) 8th, Duration 1 Semester
Elective Course

Content Specific Vocabulary

Computer Systems

account -A collection of applications, preferences, and other settings for a single user.

Android -An open-source operating system derived from Linux and designed to run on many types of smartphones and tablets.

App-A Windows 8 application, which is an application that takes up the entire screen when it runs and provides a clean, uncluttered workspace for viewing information.

application software-The software you use most directly to perform tasks, such as writing a report.

boot process-A series of steps the computer and operating system must complete before you can interact with the operating system.

Buffer-Part of memory or storage where data waits until it can be transferred to a device.

Click-To press the left mouse button.

command-line interface A user interface that requires you to type text commands to interact with the operating system.

Computer-An electronic device that receives data (input), processes data, stores data, and produces a result (output).

computer literate-Having the ability to use today's computer hardware and software efficiently to enhance your life and the lives of those around you, and understanding a wide range of information about current computer technology and how it's used to solve problems.

Data-A collection of raw, unprocessed facts, including text, numbers, sound, images, and video.

Desktop-In Windows 8, the main work area for running productivity applications, especially those created for earlier versions of Windows, such as Windows 7.

desktop application-In Windows 8, a program that opens and runs in a window on the desktop.

digital divide-An economic gap between those who are computer literate and enjoy access to computer technology and those who do not.

Driver-A small program that enables the operating system to interact with a hardware device.

embedded operating system-An operating system included in the hardware of a device, and is designed to run an electronic device for a specific purpose and a single type of task with little or no intervention from users.

graphical user interface (GUI)-An interface that uses icons and other graphics to accept data and commands.

hard disk-Hardware for storing data.

Hardware-Physical components such as wires, transistors, and circuits and electronic devices such as a computer, printer, and monitor.

Icon-A small on-screen picture.

Information-Data processed into a meaningful form.

information processing cycle-The series of steps that includes input, processing, output, and storage.

Internet A worldwide system of linked computers.

iOS-A version of Mac OS X written for Apple's mobile devices.

Linux-A personal computer operating system related to UNIX.

Mac OS X-The operating system designed to run on the Macintosh computer.

Multitasking-Working with more than one program at the same time.

multiuser operating system-An operating system that lets many users run programs and take advantage of the computer's resources at the same time.

network -A group of two or more computers linked together.

open-source software-Software that anyone can use, modify, and distribute.

operating system-Software that coordinates the resources and activities on a computer.

Password-A confidential word or phrase.

Peripheral-An input, output, or storage device connected to a computer.

Plug and Play-An operating system feature that finds and installs a device driver for new hardware so you can use the new hardware right away.

random access memory (RAM)-Memory the computer uses to store instructions and data temporarily.

Resource-Any component a computer system requires to do work

scroll bar-An on-screen object that contains arrow buttons and a box you can use to scroll the screen right and left or up and down.

Server-A computer that provides network services such as e-mail to other computers.

server operating system -An operating system that resides on a server computer and is used to manage a network.

sign in-To identify yourself to the operating system.

Smartphone-A cell phone that includes many features of a computer, such as an operating system and the ability to connect to the Internet.

Software-Instructions, or programs, for controlling a computer.

Start screen-The screen where you start working on a Windows 8 computer.

system software-The software that runs a computer, including the operating system and utility programs.

Tablet-A one-piece mobile computer that typically includes a touchscreen.

Touchscreen-A screen you touch to interact with software.

Username-A unique name that identifies you to a system.

utility program-A program that helps the operating system setup, maintain, and protect a computer.

Input Output & processing

arithmetic logic unit (ALU) The section of the CPU that performs arithmetic calculations and logical operations.

automatic update An update that automatically checks for software updates and then downloads them when they are available.

bit size A measure of CPU performance that indicates how many bytes of data the CPU can retrieve from RAM at once.

byte An amount of data roughly equivalent to one character.

cache Memory available to the CPU to speed processing.

central processing unit (CPU) A single computer chip that contains all the electronic circuitry for performing a personal computer's processing tasks.

chip A small, thin piece of silicon containing electronic circuits. Also called an integrated circuit (IC).

circuit board A thin metal plate or board with an extensive electronic circuit.

clock speed The processor's speed indicated as the number of instructions the CPU can process per second.

Control Panel A window containing specialized tools that you use to change the way Windows looks and behaves.

control unit The section of the CPU that coordinates all of the processor's activities and manages the flow of information through the processor.

electrically erasable programmable read-only memory (EEPROM) A type of ROM that is nonvolatile, but can be modified.

execution cycle (E-cycle) The executing and storing operations in the machine cycle.

firmware A chip that stores data or instructions permanently.

flash memory A type of EEPROM that can be updated much more quickly than EEPROM.

gigahertz (GHz) One billion hertz.

heat sink Hardware that collects heat from an electronic component so a fan can cool it quickly.

install To move a copy of the software from its distribution location to your computer.

instruction cycle (I-cycle) The fetching and decoding operations in the machine cycle.

level 1 cache memory Cache memory stored closest to the CPU, often on the CPU itself.

level 2 cache memory A larger amount of memory than level 1 cache memory that can reside on the CPU itself or on a chip that has a direct connection to the CPU.

machine cycle The four basic operations the CPU performs to carry out an instruction: fetching, decoding, executing, and storing.

manual update An update you download and install yourself.

megahertz (MHz) One million hertz.

motherboard A computer's main circuit board.

Mouse Mode The default mode in Microsoft Word and other Office applications that places buttons close together on the Ribbon.

multicore processor A single chip that contains more than one processor, and includes dual-core processors (two processors on one chip) and

quad-core processors (four processors on one chip).

multiprocessing An operating system technique that splits tasks among processors so that each processor can work on a different task at the same time.

multithreading A technique that allows the operating system to handle many parts threads of a single program.

nonvolatile memory Permanent memory.

patch A small program that corrects or enhances existing software.

performance How efficiently hardware and software perform tasks.

processor A single computer chip that contains all the electronic circuitry for performing a personal computer's processing tasks.

read-only memory (ROM) Permanent memory stored on single chips on the motherboard.

register A memory cell on the CPU for temporarily storing data.

service pack A collection of updates, fixes, or enhancements to software delivered as a single file.

system requirements Hardware specifications necessary for running software.

system unit The case that contains a computer's main system components.

thrashing A condition where the operating system spends more time swapping data between RAM and virtual memory than running software.

Touch Mode In Microsoft Word and other Office applications, an application mode that adapts the Ribbon for users of touchscreens.

update A collection of files (larger than a patch) that revise software to fix problems or provide enhancements.

upgrade A new version of software in which the developers make major improvements, add new features, or change the software design.

volatile memory Temporary memory.

Windows Update A Control Panel tool you use to check for the latest updates to Windows and to review your update settings.

Computer Protection

application file A necessary file for running an application.

Clipboard A temporary storage area for files and information that you copy or move from one place and plan to use somewhere else.

contextual tab A tab on the Ribbon that appears only when you are performing certain tasks, and contains options related to your current task.

copy To place a duplicate of a file in a new location that you specify.

data file A file created by an application.

disk A storage device for digital data.

drive Hardware that can retrieve and usually record data on a disk.

executable file A file that can perform tasks automatically when you open it.

external hard disk A removable disk that you can attach to your computer.

file attribute A file detail or setting that can be turned on or off.

File Explorer The file management tool provided with Windows 8.

file path A notation that indicates where a file is stored and includes the drive name and letter, folder and subfolders, and full filename.

file system The hierarchy of folders and files an operating system uses to organize files.

file type (file format) The characteristic of a file that determines the type of data it contains.

folder A container for files.

library An organization tool for folders and files that displays similar types of files together, no matter where they are stored.

move To remove a file from its current location and place it in another location you specify.

pin To add a shortcut to a folder or application to the Start screen or other location.

Recycle Bin An area on your hard disk that holds deleted files until you remove them permanently.

removable media Disks that you insert or attach to a computer.

root directory Where Windows stores folders and important files that it needs when you turn on the computer.

shortcut An icon or tile that provides a quick way to perform an action such as opening a folder.

shortcut menu A menu that appears when you right-click an object on the screen.

subfolder A folder within another folder.

system file A file necessary for running the operating system.

tag A keyword you associate with a file.

USB drive A removable disk that you plug into a USB port on your computer.

Computer maintenance

accessibility Features that make a computer easier to see, hear, and use.

Administrator account A user account created when Windows 8 is installed and provides full access to the computer.

cloud computing Computing services stored online.

color scheme A set of coordinated colors.

group policy A setting that affects how Windows works and what rights and permissions user accounts have.

hibernation A power state that saves your work to your hard disk, reduces the power for a specified amount of time, and then turns off your computer.

hybrid sleep A power state that saves your data on the hard disk before putting your computer to sleep.

local-only user account A user account that lets you access only resources on your computer.

localize To use settings appropriate for a particular location.

Microsoft account A type of user account that lets you access Microsoft cloud computing services as well as your local computer resources.

notification A message from Windows or an application that appears in the upper-right corner of the screen.

password A series of letters, numbers, spaces, and symbols that you provide to access your files, applications, and other resources on the computer.

permission A condition that allows a user account to access a file, folder, or other object.

power plan A collection of hardware and system settings that manages how your computer uses and conserves power.

power state A set of conditions that determines how much power the computer is using.

property A characteristic of an object such as a file.

right A task a user account is allowed to perform. For example, the Administrator account has full rights to install software.

screen saver An animated design or image that appears after the computer has been idle for a specified amount of time.

OneDrive A location on a Microsoft server that Windows 8 and some Windows 8 apps can access.

Standard account A user account designed for everyday computing.

system time The time the computer uses, which is displayed in the notification area of the taskbar.

theme A desktop background and a set of colors, sounds, and other elements.

user credentials A username and a password.

Computer-related issues

access time The average number of milliseconds (ms) it takes a computer to retrieve data from the storage device.

adapter card A circuit board that can be plugged into an expansion slot on the motherboard of a desktop or server computer.

aspect ratio The ratio of width to height.

audio input Sound entered into a computer, such as speech, sound effects, and music.

bar code A matrix or series of lines with varying widths and heights that represents letters and numbers.

binary Understanding only two states off and on, represented by 0 and 1.

biometrics A security technique using automated methods of recognizing a person based on a physical or behavioral characteristic.

bit The smallest unit of data a computer can process; short for binary digit.

bus A sequence of electronic circuitry used to transfer data among computer components.

data transfer rate A measurement that determines how much data the storage device can move per second from the storage media to the computer.

digital light processing (DLP) A technology that bounces light off microscopic mirrors on a computer chip.

digital video (DV) camera A type of camera you can use to send live images over the Internet, make video telephone calls, and send e-mail messages with video attachments.

direct-access storage A storage method that allows a data-retrieval mechanism to quickly find data.

ergonomic Hardware or other product designed to provide comfort and avoid stress to the human body during usage.

expansion card A circuit board that can be plugged into an expansion slot on the motherboard of a desktop or server computer.

ExpressCard module Hardware that portable computers use to connect peripheral devices to slots or ports that you can access outside of the system unit.

external hard drive A separate, freestanding high-capacity storage device that you attach to a computer, usually using a USB port.

FireWire (IEEE 1394) A bus standard developed by Apple as a high-speed method for connecting multimedia devices such as video cameras to a computer.

hard drive The main storage device in a computer; also called a hard disk drive.

inkjet printer A nonimpact printer that creates text and images by spraying ink onto paper.

input device A peripheral device you use to enter data and commands into the computer.

laser printer A nonimpact printer that produces text and images using the same technology as copier machines.

liquid crystal display (LCD) A technology that manipulates light within a layer of liquid crystal cells to produce an image.

monitor The display device used on desktop computers.

mouse A pointing device that fits comfortably in the palm of your hand. You move a mouse on a smooth horizontal surface to control the pointer on the screen.

optical storage device A device that uses lasers to read and write data on plastic platters that contain a metal layer, which reflects the laser light back to a sensor in an optical drive.

pixel The smallest surface area that can contain color on a display device; short for picture element.

pointing device An input device you use to position the pointer on the screen.

pointing stick A pressure-sensitive device that looks like a pencil eraser and is located on the keyboard, generally between the G, H, and B keys.

port A connector located on the system case that you use to plug peripheral devices into the computer.

projector An output device that connects to a computer and projects images onto a wall screen or other large, flat surface; also called a data projector.

Computer Technology

Career/Tech

Grade(s) 8th, Duration 1 Semester
Elective Course

RFID reader An input device that scans the codes stored in an RFID tag.

RFID tag A tiny chip with a radio antenna that can be attached to almost anything, including products, price tags, and shipping labels.

scanner A device that can change images into codes that the computer accepts as input.

screen resolution The number of pixels displayed on a screen.

solid-state drive (SSD) A type of hard drive that uses flash memory technology to store data as electrical rather than magnetic charges.

storage device Hardware that records and retrieves data from storage media.

storage media The physical materials used to store data, such as disks and DVDs.

stylus A pen-like writing instrument that works with touchscreens.

touchpad A touch-sensitive surface that can convert the motion and position of your fingers to a relative position on screen; also called a trackpad.

trackball A pointing device that works like a mouse with a ball on top of the device. You use your thumb and fingers to manipulate the ball, which controls the pointer on the screen.

Universal Serial Bus (USB) A common type of bus that you can use to connect 127 different devices to a single USB port.

USB adapter Hardware that portable computers use to connect peripheral devices to slots or ports that you can access outside of the system unit.

USB hub A device that contains a number of USB ports, and plugs into a single USB port on a computer.

video input Still or moving images captured electronically.

Software and hardware Interaction

all-in-one desktop A desktop computer that houses the processing components in the same case that holds the monitor.

convertible tablet A tablet computer that uses a hybrid design that includes a swivel screen or removable keyboard so you can use the computer as a laptop or tablet.

desktop computer A computer that fits on or next to a desk, is designed to be stationary, and runs on power from a wall outlet.

e-book reader A mobile computing device you use to download and read electronic versions of printed books, magazines, and newspapers.

electronic paper display The type of display screens used by e-book readers; they consume less power and provide higher contrast in bright light than LCDs.

embedded computer A processor built into a household appliance or other device such as an ATM, navigation system, refrigerator, television, or other consumer electronics.

enterprise server A server used by large corporations to provide employees access to special software used to run the company's business.

file server A server used by small businesses to share files and programs among employees.

handheld game device A mobile device designed for a single video game player to use at one time.

laptop computer A lightweight mobile computer about the size of a paper notebook that includes the system components, keyboard, pointing device, and display screen in a single unit.

mainframe computer A powerful computer designed for intensive data processing for hundreds or thousands of users at the same time.

netbook computer Similar to a laptop computer, but smaller and lighter, with less power and storage capacity, lacking a CD/DVD drive, and providing a smaller keyboard and display screen than laptops, but including batteries that hold a charge longer.

network adapter A card installed on the motherboard that connects a server to a network or the Internet.

notebook See laptop computer.

personal computer A computing device that can perform input, processing, output, and storage activities on its own and is designed to be used by one person at a time.

portable media player A mobile device that can store digital media such as songs, videos, and photos, typically on a small hard drive.

scalability The ability to increase processing capacity to handle additional data.

supercomputer A very powerful computer distinguished by its processing capacity, especially its speed of calculation. To be classified as a supercomputer, a computer must be one of the fastest computers in the world.

tower A case containing the system unit that stands vertically on the floor.

ultrabook See netbook computer.

Web server A server that handles the exchange of information across the Internet.

Software Fundamentals

activate To provide information such as a serial number to ensure that you are installing software only on the number of computers specified in the software license.

end user license agreement (EULA) The document that displays when you begin installing software, summarizing the software license and the terms and guidelines for your legal use of the software.

freeware Copyrighted software the developer makes available to users free of charge.

mobile app Software specifically designed for a handheld computer, such as a tablet or smartphone.

public domain software Software that the developer has donated for public use or for which the copyright has expired; it is the only type of software that is not copyright-protected.

registry A database of information about the configuration of a Windows computer.

setup program The program that guides you through the steps of installing software and prepares the software so you can use it on your computer.

shareware Noncommercial copyrighted software distributed free of charge, usually for a trial period; after the trial period, you pay the developer a small fee to continue using it.

single-user license A software license that gives only one person the right to install and use the software.

site license A software license that allows multiple users to access the software at the same time.

software license A legal agreement that specifies how you can install and use software.

software registration An optional process of identifying yourself to the software manufacturer as the person who purchased a copy of the software.

system recovery disk Removable media such as a DVD that contains system recovery tools to help restore a computer if a serious system error

occurs.

uninstaller A tool similar to a setup program that completely removes software from your computer.

Operating Systems

active cell The currently selected cell in a worksheet.

algorithm A set of rules a program follows in calculations or other problem-solving steps.

bad sector A sector on a disk that does not record data reliably.

blog A Web site where one or more authors regularly post commentaries, opinions, and other personal information. Short for web log.

bot A program that runs repetitive tasks.

cell The point where a column and a row intersect in a spreadsheet.

clip A segment of a video or other media.

cluster Each part of a file stored in a sector.

computer-aided design (CAD) A special type of 3-D graphics software used by professional designers to create models of products, buildings, and other objects; engineering and technical drawings; and blueprints for architectural projects.

database A collection of data organized into tables.

defragmenter A type of disk management tool that optimizes the way files are stored on the disk.

disk cleaner A type of disk management tool that identifies files you can safely delete to free up disk space.

disk management utility A type of utility software that helps the operating system store files efficiently on a disk and removes unnecessary files.

disk scanner A type of disk management tool that scans for disk errors, and then repairs them. Also called an error-checking tool.

field A single characteristic of a person, place, thing, or event.

file utility A type of utility software that helps you manage files, convert files from one format to another, or thoroughly delete files.

formatting The appearance and arrangement of elements on a page.

formula A mathematical expression that provides a result.

frame In DTP software, a movable rectangular area on a page in which you enter text and graphics.

function A predefined formula that performs common calculations.

grammar checker A feature of a word-processing application that marks common grammar errors such as incomplete sentences and suggests corrections.

layout A pre-set arrangement for slide content, including text and graphics that provide placeholders in which you can enter and edit text in formats that audiences can view and read easily, including headings, bulleted and numbered lists, and graphics.

lossless compression A type of file compression that reconstructs the original file without losing any data.

lossy compression A type of file compression that permanently removes data identified as unnecessary in the file.

lost cluster A file system error that occurs if the operating system loses track of which clusters contain the data that belongs to a particular file.

malware Harmful software, including computer viruses, worms, Trojans, bots, and spyware. Short for malicious software.

playlist A list of songs or other media organized in sequence.

primary key A field that uniquely identifies each record in a table.

query In a database, a request for specific data that meets set criteria.

record A group of related fields in a database table.

sector A block of 512 bytes in a track on a disk.

sidebar A short article, often appearing in a box, that appears alongside a main article or other content to provide additional explanation or supporting material.

software suite Related applications that are bundled together in a single software package.

software utility A utility program for managing or maintaining software, including software updating tools, virus and other malware scanners, and system monitors.

spelling checker A feature of a word-processing application that compares the spelling of one or more words to the words in its electronic dictionary, flags the ones that might be misspelled, and offers possible corrections.

spreadsheet An arrangement of text and numbers in a rectangular grid or table.

spyware Software that monitors your computing actions, usually while you are online, to collect information about you.

Trojan Malware that hides inside another program, and infects a computer when the program is installed.

virus A file that copies itself and triggers computer code to infect your computer.

what-if analysis A way to explore how changing numbers and other values such as dates affects calculated results.

word wrap A feature that keeps text within the document margins. When the text you are typing fills a line, word wrap moves the text to the next line without requiring you to press the Enter key.

workbook A Microsoft Excel file containing worksheets.

worksheet In Microsoft Excel, a grid of columns and rows that can contain text, numbers, and formulas; also called a sheet.

worm Harmful computer code that spreads without your interaction.

Windows Management

knowledge base A collection of articles, videos, and other sources containing information about a product or topic.

online forum A Web site where people conduct conversations by posting messages.

power surge A boost to the electrical charge that powers the computer, and can occur during lightning storms, power outages, short circuits, and other disruptions to a computer's power source.

problem report A copy of the error data, which includes details about the problem, such as the name and version of the application, when the error occurred, and technical information about the state of the system at that time.

quarantine A location on your computer suspicious files are stored safely.

Safe mode A troubleshooting option for desktop operating systems that starts your computer with only basic services and functionality.

spyware definition A file containing the characteristics of known spyware.

System Restore A system utility that helps you restore system files to an earlier state, usually one during which the startup problem did not occur.

thread A group of related messages in an online forum.

troubleshooting To take a logical, systematic approach to identify the source or cause of the problem, and then apply a solution so that the computer is working normally again.

virus definition A file containing the characteristics of known viruses.

Operating System Customization

backup A duplicate copy of a file that you use if the original file is lost, damaged, or destroyed.

backup plan A plan that follows a regular schedule for creating different types of backups.

backup software A set of system utilities for creating and updating backups and for restoring files from a backup.

differential backup A type of backup that copies only the files that have changed since the last full system backup.

encryption A security method that encodes data so that only authorized people can access it.

full system backup An exact duplication of the hard drive, including data files, system files and settings, application files, and the operating system.

incremental backup A type of backup that copies the files that have changed since the last full system backup or the last incremental backup.

local backup A backup created with the computer containing the files you want to backup and stored on removable media or a network folder.

online backup A backup created directly on a secure server.

redundancy Creating more than one copy of a backup.

remote backup A backup created directly on a secure server.

restore To copy a backup file to its original location on your computer.

selective backup A backup for which you select the folders and files you want to back up.

synchronize To compare files on two drives and update files as necessary so the drives contain the same versions of the files.

uninterruptible power supply (UPS) A device that contains a battery to provide power if the normal current is interrupted.

Topic: Exploring Computers Systems & Input, Output, and Processing

Duration: Ongoing

Learning Targets

Identify system components and types of storage.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Consider input and output devices to evaluate computer performance.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Computer Protection and Maintenance

Duration: Ongoing

Learning Targets

Identify computer maintenance issues.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Identify environmental factors affect computers.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Computer Related Issues & Software Hardware Interaction

Duration: Ongoing

Learning Targets

Identify and following problem-solving processes.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Understand how hardware and software interact.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Exploring Software Fundamentals

Duration: Ongoing

Learning Targets

Using word-processing, spreadsheet, and presentation, and database software.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Selecting the right software for the task.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Topic: Windows Management & Operating System

Duration: Ongoing

Learning Targets

Identify the purpose of an operating system. Applying system settings in the control panel.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Computer Technology

Career/Tech

Grade(s) 8th, Duration 1 Semester

Elective Course

Identifying strategies for working with files, and managing files.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Unit: Key Applications

Duration: 13 Week(s)

Overarching Essential Question(s) Covered

How will students demonstrate their knowledge of computer fundamentals and business computer application skills necessary to advance their education, and employment opportunities that require fluency with these standardized programs?

Academic Vocabulary

analyze, conclude, author's purpose, describe, resolution, dialogue, specific, meaning, determine, point of view, develop, author, compare, contrast, experience, viewing, perception, similarities, differences, accurate, detail, event, elaborate, explain, illustrate, individual, section, paragraph, graphics, headings, media, issue, information, summarize, evaluate, argument, evidence, valid, claim, presentation, perspective, facts, reasons, details, credible source, persuade, style, conclusion, transitions, audience, formal style, conclusion, introduction, formatting, selection, organization, analysis, setting, rising action, sequence, task, purpose, planning, editing, publish, keyboarding, medium, collaborate, interact, skills, key words, site source, internet search, research, project, inquiry, bibliography, digital source, credible, paraphrase, plagiarism, support, reflection, summary, edit, suggest, opinion, textual evidence, synonyms, antonyms, word choice, information, sequence, concrete details

Content Specific Vocabulary

Exploring Microsoft Office

application window The main window that serves as the primary interface between the user and the application.

Backstage view A feature that provides quick access to common tasks for managing documents, such as saving, opening, and printing.

cursor A vertical blinking line in the document window that indicates the location where new text and data will be entered.

document window The area in an application window where you enter new text and data or change existing text and data.

file A collection of information saved as a unit.

file compatibility The ability to open and work with files without a format conflict.

file extension Three or four characters automatically added to the filename when the document is saved; a period separates the filename and the extension, which identifies the type of file.

folder A means for organizing files into manageable groups.

I-beam The mouse pointer shape (which looks like a capital letter I) when the mouse is positioned within the document window.

insertion point A vertical blinking line in the document window that indicates the location where new text and data will be entered.

Jump List A collection of links that provides quick access to files and data.

minimized The state in which an application is still running, but the application window is no longer displayed on the screen.

open To load a file into an application.

path The route the operating system uses to locate a document; the path identifies the disk and any folders relative to the location of the document.

Ribbon A banner in the Office Fluent user interface that organizes commands in logical groups presented on tabs.

save To store a document on a disk or other storage medium.

ScreenTip A small window with descriptive text that displays when you position the mouse pointer on a command or control in the application window.

scroll To move text and content vertically or horizontally on a display screen when searching for a particular section, line, option, and so on.

shortcut A pointer to an application or document file; double-clicking the shortcut icon opens the actual item to which the shortcut is pointing.

shortcut menu A list of the command options most commonly performed from the current window display.

subfolder A folder within another folder.

template A file that affects the basic structure of a document and contains document settings such as fonts, line spacing, margins, and page layout.

Getting Started with Word Essentials

default (1) A setting that is automatically used unless another option is chosen. (2) In any given set of choices, the choice that is preselected, the selection that is in effect when you open an application, or the settings established during the installation process.

Normal.dotm template A file containing default styles and customizations that determine the structure and page layout of a document.

toggle To alternate between the off and on states by repeating a procedure, such as clicking a button.

word wrap A feature by which Word automatically wraps the text to the next line.

Editing and Formatting Documents

alignment How text is positioned between the left and right margins.

Clipboard A temporary storage place in your computer's memory that is shared among all the Office applications.

drag-and-drop editing Using the mouse to drag selected content from the existing location and then dropping the selected content in a new location.

edit Modify or adapt and make revisions or corrections.

first line indent Only the first line of the paragraph is indented.

font The design of the typeface.

format To change the appearance of the text or of the whole document.

Format Painter A Microsoft Office feature used to quickly copy and apply font and paragraph formatting as well as some basic graphic formatting, such as borders, fills, and shading.

hanging indent The first line of text begins at the left margin and all other lines of the paragraph hang, or are indented, to the right of the first line.

incremental search A search that returns matches for the string of characters in the document as you type; as the search text is augmented, the matches for the searched text in the document change.

indent A space inserted between the margin and where the line of text appears.

Insert mode In this default mode, when you enter new text in front of existing text, the existing text shifts to the right to make room for the new text.

landscape orientation A page layout in which the content of the document is formatted with the long edge of the page at the top.

manual line break A paragraph mark inserted by the user to force a line break at a specific location and thereby create a new paragraph.

manual page break A command inserted by the user to force a page break at a specific location.

margin The blank space around the edges of the page.

Overtyping mode In this mode, new text replaces existing characters.

points The units of measure for fonts. The larger the point number, the larger the font size. (One inch equals approximately 72 points.)

portrait orientation A page layout in which the content of the document is formatted with the short edge of the page at the top.

select To point to an object and then press and release the primary mouse button. Also to identify blocks of text or objects you want to edit.

soft page break A page break that is automatically inserted when you fill a page with text or graphics.

wildcard character A keyboard character used to represent one or more characters in a search.

Sharing Documents

blog An abbreviated version of the term Web log; a journal maintained by an individual or a group and posted on a Web site for public viewing and comment.

case sensitive When entering a password, the upper- and lowercasing of the letters must be identical to the casing of the letters in the assigned password.

Cloud A network where files are uploaded to a library on the Internet.

collating Printing all the pages in one copy of a document before printing the next copy so that the printed pages are automatically arranged in the proper order as they print.

comment An annotation that the author or a reviewer adds to a document; it is not part of the text but is viewable in the margin or in a separate pane, and it can be printed with the document.

duplex printing Printing on both sides of the paper

encryption A standard method for encoding data.

hard copy A printed copy of a document.

markup The revision marks and comments that display in a document.

metadata Data that describes other data.

Portable Document Format (PDF) A format developed by Adobe Systems designed to preserve the visual appearance and layout of each page and enable fast viewing and printing.

print queue A feature that shows information about documents that are waiting to print.

read-only document Users can open and view the document, but they are not able to make any changes to the document.

reverse printing Reverses the order of the pages so that the last page prints first.

OneDrive A free, online library space for storing and sharing files, accessible by those with registered Microsoft accounts.

soft copy A digital copy of data.

XML Paper Specification (XPS) A format developed by Microsoft designed to preserve the visual appearance and layout of each page and to enable fast viewing and printing.

Working with Tables

ascending order Alphabetical order from A to Z, or numerical order from lowest number to highest number.

banded columns Even-numbered columns are formatted differently than odd-numbered columns.

banded rows Even-numbered rows are formatted differently than odd-numbered rows.

cell One intersection of a row and a column in a table.

descending order Alphabetical order from Z to A, or numerical order from highest number to lowest number.

gridlines Boundary lines in a table used for layout purposes; they display on the screen, but they do not print.

header row The first row in a table or data source with the column headings.

merging cells Combining multiple cells by removing the boundaries between the cells, usually done to create a title or informational text over multiple columns.

Quick Tables Built-in tables with sample data and table formats.

splitting cells Converting a cell into multiple cells by adding cell boundaries.

Enhancing Docs

blog An abbreviated version of the term Web log; a journal maintained by an individual or a group and posted on a Web site for public viewing and comment.

boilerplate text Content that is frequently used in documents.

building blocks Document parts that are already designed and formatted.

character styles Styles that provide text formats such as font name, font size, font color, bold, italic, underline, borders, and shading.

document template A file that contains document settings, content, and formats that are available only to documents based on that template.

fields In Access, a single piece of database information, such as a first name, a last name, or a telephone number.; in Word, an indication of a location in which variable text or data can be inserted.

footer Information and/or graphics that print in the bottom margin of the page.

global template A file that contains document settings that are available to all documents.

header Information and/or graphics that print in the top margin of the page.

linked styles Styles that provide either text or paragraph formats, depending on the content that is selected when the style is applied.

Normal template (Normal.dotm) A file containing default styles and customizations that determine the structure and page layout of a document.

paragraph styles Styles that provide both text formats and paragraph formats such as line spacing, text alignment, indentation, and tab stops.

placeholder text Provides guidance for adding text, pictures, tables, or charts to fields.

style A set of formatting characteristics that you can apply to characters, paragraphs, tables, and numbered and bulleted lists.

template A file that affects the basic structure of a document and contains document settings such as fonts, line spacing, margins, and page layout.

Working with Graphics

AutoShape A predesigned drawing object, such as a star, an arrow, or a rectangle.

banner A headline that spans the full width of the page, such as the title for newsletter columns.

clip art A graphic that is ready to insert in a document.

crop To cut off portions of a graphic that you do not want to show.

desktop publishing The process of creating a document using a computer to lay out text and graphics.

drawing canvas Provides a frame-like boundary between a drawing and the rest of the document and keeps your shapes together as one object.

drawing objects Shapes, curves, and lines to create your own graphic.

graphics Items other than text, such as digitized photographs, scanned images, and pictures.

manual column break A command inserted by the user to adjust where a column ends.

outcrop Add extra white space around a graphic.

resizing Stretches or shrinks the dimensions of a graphic.

section An area within a document that can have its own separate page formats.

section break A formatting code that divides the document into multiple sections and controls the section formatting of the text that precedes it.

sizing handles Small circles and squares on the border of a graphic or object indicating that it is selected.

SmartArt graphics Built-in, predesigned, and formatted layouts which you can use to illustrate concepts and ideas.

text box A drawing object that enables you to add text to artwork.

WordArt graphics A feature that enables you to transform text into a graphic.

Getting Started with Excel Essentials

active cell A selected cell in an Excel worksheet.

cell One intersection of a row and a column in a table or worksheet.

cell reference Identifies the column letter and row number in a worksheet (for example: A1 or B4).

column heading The letter at the top of the column in a worksheet.

range A group of adjacent cells selected in a worksheet. All cells in a range touch each other and form a rectangle.

row heading The number at the left of the row in a worksheet.

spreadsheet A grid of rows and columns into which you enter text data (i.e., surnames, cities, states) and numerical data (i.e., dates, currency, and percentages).

value The text and numbers contained in a worksheet cell.

workbook Where worksheets are stored; a workbook contains one or more worksheets.

worksheet A spreadsheet in Excel, consisting of a grid of rows and columns formatted to contain numbers, text, and formulas.

Organizing and Enhancing Worksheets

cell style A set of predefined formats you can apply to some of the worksheet data.

collated The printed pages are organized in the proper sequence.

conditional formatting Applies designated formats to cells when the cell value meets specified conditions (criteria).

filter To screen for data matching specified criteria.

freeze To lock a row or column to keep an area visible as you scroll through the worksheet.

header row Column headings or field names at the top of columns in a data source.

split To divide a worksheet into two panes.

table style A set of predefined formats that you can apply to all the worksheet data.

worksheet tab A tab in the horizontal scroll bar to provide quick and easy access to a worksheet.

Creating Formulas and Charting Data

absolute cell reference A reference that does not change when the formula is copied or moved to a new location.

argument A value, a cell reference, a range, or text that acts as an operand in a function formula; it is enclosed in parentheses after the function name.

chart A graphic representation of worksheet or table data.

complex formulas Excel formulas containing more than one operator.

embedded chart A chart created on the same sheet as the data used in the chart.

formula The equation using numbers and cell references to perform calculations such as addition, subtraction, multiplication, and division.

function formula A special formula that names a function instead of using operators to calculate a formula.

mathematical function A function that performs calculations that you could perform using a scientific calculator.

mixed cell reference A cell reference that contains both relative and absolute references.

operand A number or cell reference.

operator A symbol that indicates the mathematical operation to perform with the operands.

order of evaluation The sequence used to calculate the value of a formula.

relative cell reference A cell reference that will be adjusted relative to the formula's new location when a formula is copied or moved to a new location.

sparkline A tiny chart embedded in a cell that provides a visual representation of data.

statistical function A function that describes large quantities of data.

Getting started with PowerPoint Essentials

Outline tab Shows the text on each slide; enables you to edit text and navigate and organize the slides in the presentation.

presentation The document file in PowerPoint.

slide A single page of a presentation.

slide layout The arrangement of placeholders on a slide.

Slide Master The main slide that stores information about the theme and layouts of a presentation.

slide pane A pane in the presentation window that contains the slide content.

Slides tab Shows a thumbnail for each slide in the presentation file.

Enhancing Presentations with Multimedia Effects

animation Special visuals or sound effects added to text or an object.

emphasis effects Settings used to draw attention to an object that is already visible on a slide in a PowerPoint presentation.

entrance effects Settings used to control how an object enters onto a slide in a PowerPoint presentation.

exit effects Settings used to control how an object leaves a slide in a PowerPoint presentation.

motion paths Settings used to create a path for an object to follow on a PowerPoint slide.

slide transitions Settings that determine how a slide is introduced as you move from one PowerPoint slide to another in Slide Show view.

trigger An instruction that will start a sound effect or animation segment on a PowerPoint slide.

Getting Started with Access

cell One intersection of a row and a column in a table or a worksheet.

data type A field property in Access that determines the type of data a database field can store.

database A collection of related information organized for rapid search and retrieval.

datasheet A database table that stores subject-based data; the primary object in a database.

entry Data entered in a datasheet cell.

field In Access, a single piece of database information, such as a first name, a last name, or a phone number.

field name A label that helps identify the field.

field properties Definitions of the characteristics of and behavior of a database field.

primary key Unique identifier of each record in an Access table.

record A group of related fields in a database, such as all the contact information for an individual.

relational database A database in which information is organized into separate subject-based tables, and the relationship of the data in one or more tables is used to bring the data together.

Managing and Reporting Database Information

form A database object which provides a convenient way to enter, edit, and view data from a table.

query A database object which enables you to locate multiple records matching specified criteria.

report A database object which allows you to organize, summarize, and print all or a portion of the data in a database.

Topic: Microsoft Word Processing

Duration: 4 Week(s)

Topical Essential Question(s) Covered

How will students apply business computer applications skills to maximize their ability to communicate, collaborate, and think critically and socially online in a safe and ethical way? How does knowing Microsoft Word Processing apply to your education and the workplace?

Learning Targets

Exploring Word Essentials

Editing & Formatting Documents

Sharing Documents

Working with Tables

Enhancing Documents

Working with Graphics

Topic: Microsoft Excel Spreadsheet

Duration: 4 Week(s)

Topical Essential Question(s) Covered

How will students apply business computer applications skills to maximize their ability to communicate, collaborate, and think critically and socially online in a safe and ethical way? How does knowing how setup and utilize the elements of a spreadsheet apply to your education and the workplace?

Learning Targets

Excel Essentials

Organizing and Enhancing Worksheets

Creating Formulas and Charting Data

Topic: Microsoft PowerPoint Presentation

Duration: 4 Week(s)

Topical Essential Question(s) Covered

How will students apply business computer applications skills to maximize their ability to communicate, collaborate, and think critically and socially online in a safe and ethical way? How does knowing how to utilize the elements of PowerPoint maximize and enhance their presentation skills?

Learning Targets

PowerPoint Essentials

Enhancing Presentations with Multimedia Effects

Topic: Microsoft Access/Database

Duration: 1 Week(s)

Topical Essential Question(s) Covered

Understand how to setup and organize data to enhance your ability to analyse information in the form of a database.

Computer Technology

Career/Tech

Grade(s) 8th, Duration 1 Semester
Elective Course

Learning Targets
Access Essentials

Resistance Training 2 Workout Guidelines and Development

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Course Description

This course is designed as an introduction to proper weight lifting techniques utilizing machines and free weights, (barbells, dumbbells, fixed barbells, ect.) Students will be given the opportunity to extend the acquisition of knowledge and development introduced in Resistance Training 1 that may be used in physical fitness pursuits today as well as in later life, further improve strength, endurance and further enhance body image. The students will be working with a predetermined choice of lifts and periodization within instructor prescribed guidelines to reach personal goals.

Timeframe	Unit	Scope And Sequence
		Instructional Topics
Ongoing	Lifting Characteristics & Guidelines	1. Core/Large Muscle Groups 2. Auxilliary/ Smaller Muscle Groups 3. Mult-Joint Lifts 4. Single-Joint Lifts
Ongoing	Periodization	1. Lifting Progressions 2. Initial Strength Testing 3. Self Max 4. Final Strength 5. Repetition Cycles

Course Details

Unit: Lifting Characteristics & Guidelines

Duration: Ongoing

Overarching Essential Question(s) Covered

- How can core and auxilliary lifts/exercises be combined to create a resistance training workout?
- How can multi-joint and single-joint lifts/exercises be combined to create a resistance training workout?

Academic Vocabulary

Determine
relevant
evaluate
delineate
analyze
significance
implication
imply
purpose

Content Specific Vocabulary

Dumbbell
Barbell
Machine
Body weight

Topic: Core/Large Muscle Groups

Duration: Ongoing

Topical Essential Question(s) Covered

- Classify the core large muscles and what is their function?
- What lifts correlate with the use of the core muscle groups?
- How can the choice of core lifts impact individual students workout/fitness plan?

Learning Targets

PE.11-12.19.A

Demonstrate physical competency in individual and team sports, creative movement and leisure and work-related activities.

- Demonstrate knowledge and skills in a self-selected individual sport, a team sport, creative movement and work-related activities.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

PE.11-12.19.B

Analyze various movement concepts and applications.

- Apply the principles of efficient movement to evaluate personal performance.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

PE.11-12.19.C

Demonstrate knowledge of rules, safety and strategies during physical activity.

- Select components (e.g., equipment, boundaries, number of players, rules) which promote participation in novel or original physical activities.

- Analyze and apply complex offensive, defensive and cooperative strategies for selected games and sports.

Resistance Training 2 Workout Guidelines and Development

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5

Credits

Elective Course

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.20.A

Know and apply the principles and components of health-related fitness.

- Implement an individualized health-related fitness plan which includes the principles of training.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.20.C

Set goals based on fitness data and develop, implement and monitor an individual fitness improvement plan.

- Set realistic, long-term, health-related fitness goals based on an individual profile.
- Understand how aging, illness and injury affect physical activity.
- Use profile data to monitor an individual wellness/fitness plan.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.21.A

Demonstrate individual responsibility during group physical activities.

- Demonstrate individual responsibility through use of various team-building strategies in physical activity settings (e.g., etiquette, fair play, self-officiating, coaching, organizing a group activity).

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Topic: Auxiliary/ Smaller Muscle Groups

Duration: Ongoing

Topical Essential Question(s) Covered

Classify the auxiliary small group muscles and what is their function?

What lifts correlate with the use of the auxiliary muscle groups?

How can the choice of auxiliary lifts impact individual students workout/fitness plan?

Learning Targets

PE.11-12.19.A

Demonstrate physical competency in individual and team sports, creative movement and leisure and work-related activities.

- Demonstrate knowledge and skills in a self-selected individual sport, a team sport, creative movement and work-related activities.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.19.B

Analyze various movement concepts and applications.

- Apply the principles of efficient movement to evaluate personal performance.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.19.C

Demonstrate knowledge of rules, safety and strategies during physical activity.

- Select components (e.g., equipment, boundaries, number of players, rules) which promote participation in novel or original physical activities.
- Analyze and apply complex offensive, defensive and cooperative strategies for selected games and sports.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.20.A

Know and apply the principles and components of health-related fitness.

- Implement an individualized health-related fitness plan which includes the principles of training.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

PE.11-12.20.C

Set goals based on fitness data and develop, implement and monitor an individual fitness improvement plan.

- Set realistic, long-term, health-related fitness goals based on an individual profile.
- Understand how aging, illness and injury affect physical activity.
- Use profile data to monitor an individual wellness/fitness plan.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Resistance Training 2 Workout Guidelines and Development

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5

Credits

Elective Course

PE.11-12.21.A

Demonstrate individual responsibility during group physical activities.

- Demonstrate individual responsibility through use of various team-building strategies in physical activity settings (e.g., etiquette, fair play, self-officiating, coaching, organizing a group activity).

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Mult-Joint Lifts

Duration: Ongoing

Topical Essential Question(s) Covered

What lifts/exercises are identified as multi-joint?

How can the choice of multi-joint lifts/exercises affect an individual workout/fitness plan?

Learning Targets

Standard - PE.9-10.19.A Demonstrate physical competency in individual and team sports, creative movement and leisure and work-related activities.

- Perform skills efficiently in a variety of leisure activities, sports, creative movement and work-related activities.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Standard - PE.9-10.19.B Analyze various movement concepts and applications.

- Analyze various movement patterns for efficiency and effectiveness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Standard - PE.9-10.19.C Demonstrate knowledge of rules, safety and strategies during physical activity.

- Develop rules and safety procedures for physical activities.
- Select and apply offensive, defensive and cooperative strategies in selected activities, games and sports.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Standard - PE.9-10.20.A Know and apply the principles and components of health-related fitness.

- Interpret the effects of exercise/physical activity on the level of health-related fitness.
- Participate in various types of fitness training programs (e.g., circuit, cross and interval training) and describe the characteristics and benefits of each.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Single-Joint Lifts

Duration: Ongoing

Topical Essential Question(s) Covered

What lifts/exercises are identified as single-joint?

How can the choice of single-joint lifts/exercises affect an individual workout/fitness plan?

Learning Targets

Standard - PE.9-10.19.A Demonstrate physical competency in individual and team sports, creative movement and leisure and work-related activities.

- Perform skills efficiently in a variety of leisure activities, sports, creative movement and work-related activities.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Exit Slip

Standard - PE.9-10.19.B Analyze various movement concepts and applications.

- Analyze various movement patterns for efficiency and effectiveness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Standard - PE.9-10.19.C Demonstrate knowledge of rules, safety and strategies during physical activity.

- Develop rules and safety procedures for physical activities.
- Select and apply offensive, defensive and cooperative strategies in selected activities, games and sports.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Standard - PE.9-10.20.A Know and apply the principles and components of health-related fitness.

- Interpret the effects of exercise/physical activity on the level of health-related fitness.
- Participate in various types of fitness training programs (e.g., circuit, cross and interval training) and describe the characteristics and benefits of each.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Resistance Training 2 Workout Guidelines and Development

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5

Credits

Elective Course

Assessment: Performance

Unit: Periodization

Duration: Ongoing

Overarching Essential Question(s) Covered

- How do lifting cycles are used and applied while working out with free weight and machines?
- How do various lifting intensities or repetition cycles impact a students muscular strength and/or endurance?

Academic Vocabulary

- One Repetition Max
- Repetition
- Resistance
- Set
- Periodization

Topic: Lifting Progressions

Duration: Ongoing

Topical Essential Question(s) Covered

- How do you determine workout percentages from maxes for various phases of a workout schedule?

Learning Targets

PE.11-12.20.B

Assess individual fitness levels.

- Collect and interpret health-related fitness data over a period of time, with and without the use of technology.
- Evaluate the effects of fitness choices and heredity on wellness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Initial Strength Testing

Duration: Ongoing

Topical Essential Question(s) Covered

- How will students identify their one repetition max from the prescribed criteria for the assessed lifts?

Learning Targets

PE.11-12.20.B

Assess individual fitness levels.

- Collect and interpret health-related fitness data over a period of time, with and without the use of technology.
- Evaluate the effects of fitness choices and heredity on wellness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Self Max

Duration: Ongoing

Topical Essential Question(s) Covered

- How are self maxes used to monitor and evaluate your strength gains?

Learning Targets

PE.11-12.20.B

Assess individual fitness levels.

- Collect and interpret health-related fitness data over a period of time, with and without the use of technology.
- Evaluate the effects of fitness choices and heredity on wellness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Final Strength

Duration: Ongoing

Topical Essential Question(s) Covered

- Are there correlation between self max results and final strength assessment?

Learning Targets

Resistance Training 2 Workout Guidelines and Development

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5

Credits

Elective Course

PE.11-12.20.B

Assess individual fitness levels.

- Collect and interpret health-related fitness data over a period of time, with and without the use of technology.
- Evaluate the effects of fitness choices and heredity on wellness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Topic: Repetition Cycles

Duration: Ongoing

Topical Essential Question(s) Covered

What is the purpose of varying high repetition cycles to low repetition cycles?

Learning Targets

PE.11-12.20.B

Assess individual fitness levels.

- Collect and interpret health-related fitness data over a period of time, with and without the use of technology.
- Evaluate the effects of fitness choices and heredity on wellness.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Resistance Training 3 Life Long Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5 Credits
Elective Course

Course Description

This course will expose the students to a variety of workouts to be applied throughout their life. It will increase their depth of knowledge of the F.I.T.T. principle/recovery, agility, stabilization and balance. The five components of fitness will be integrated in the group/individual activities.

Timeframe	Unit	Scope And Sequence Instructional Topics
Ongoing	Agility	1. agility ladders 2. Quadrant Drills 3. Cone Drills
Ongoing	Stabilization and Balance	1. Core Stabilization 2. Dynamic Balance 3. Static Balance

Course Details

Unit: Agility

Duration: Ongoing

Overarching Essential Question(s) Covered

How does agility training impact a students' workout?

What are agility techniques that can improve a students' workout?

Academic Vocabulary

analyze
introduce
develop
connections

Content Specific Vocabulary

Frequency
Intensity
Time/Duration
Type
Overload
Progression
Target Heart Rate
Aerobic
Anaerobic

Topic: agility ladders

Duration: Ongoing

Topical Essential Question(s) Covered

What activities can be performed with an agility ladder to improve overall fitness levels?

Topical Vocabulary

agility ladder
anaerobic activity

Learning Targets

Students will analyze individual movements related to agility ladders.
Students will impact of agility ladders on their individual fitness.
Students will understand how agility ladders allow for improved fitness performance.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Students will analyze individual movements related to agility ladders.
Students will impact of agility ladders on their individual fitness.
Students will understand how agility ladders allow for improved fitness performance.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Students will consistently evaluate the impact of agility ladders on their individual fitness levels.
Students will analyze individual agility ladder exercises.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Topic: Quadrant Drills

Duration: Ongoing

Resistance Training 3 Life Long Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Topical Essential Question(s) Covered

How will quadrant/line/ drills improve overall agility?
How can cone drills impact an individuals' fitness plan/workout?

Topical Vocabulary

quadrant drills
center-of-mass
ground strike

Learning Targets

Students will analyze individual movements related to quadrant drills.
Students will evaluate the impact of quadrant drills on their individual fitness.
Students will understand how quadrant allow for improved fitness performance.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Students will consistently the impact of quadrant drill exercises on their individual fitness levels.
Students will analyze individual quadrant drill exercises.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Topic: Cone Drills

Duration: Ongoing

Topical Essential Question(s) Covered

How do cone drills affect a students' agility?
How will cone drills improve a students' fitness and agility?

Topical Vocabulary

cone drills
forward movement
backward movement
lateral movement
linear movement
vertical movement

Learning Targets

Students will analyze individual movements related to cone drills.
Students will evaluate the impact of cone drills on their individual fitness levels.
Students will understand how cone drill improve individual fitness performance.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Class Discussion/Participation

Sudents will consistently evaluate the impact of cone drill exercises on their individual exercises.
Students will analyze individual cone drill exercises.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Class Discussion/Participation

Students will consistently evaluate the impact of cone drills on their individual fitness levels.
Students will analyze individual cone drills.
Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Class Discussion/Participation

Unit: Stabilization and Balance

Duration: Ongoing

Resistance Training 3 Life Long Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Overarching Essential Question(s) Covered

What types of exercises and activities will the students incorporate into their workouts to improve core stabilization and static/dynamic balance?

Academic Vocabulary

inference
evidence
analyze
concept
introduce
develop
meaning
impact

Content Specific Vocabulary

Posture
Equilibrium
Centrifugal Forces
Core Power
Center of Gravity
Vestibular System
Coordination
Stabilizers

Topic: Core Stabilization

Duration: Ongoing

Topical Essential Question(s) Covered

What exercise and activities can assist the student in developing a stable core and how it will positively impact their individual overall wellness and fitness?

Topical Vocabulary

medicine ball
Bosu ball (flat-side up, round-side up)
planks
side plank
body bars
bridge
superman
stability ball
prone position
supine position
sit and throw (Med. ball)
one leg catching (med. ball)
kneeling/twist pass (med. ball)
sideline hip abduction (med. ball)

Learning Targets

Students will analyze individual movements related to core stabilization.
Students will evaluate the impact of core stabilization on their individual fitness.
Students will understand how core stabilization allows for improved fitness performance.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Students will consistently evaluate the impact of core stabilization exercises on their individual fitness levels.
Students will analyze individual core stabilization exercises.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation
Assessment: Performance

Topic: Dynamic Balance

Duration: Ongoing

Topical Essential Question(s) Covered

How can dynamic balance impact athletic performance and daily activities?

Topical Vocabulary

dynamic balance-maintaining balance throughout exercise
kinesthetic awareness
body control

Resistance Training 3 Life Long Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Learning Targets

Students will evaluate individual dynamic balance exercises and the impact these exercises have on an individuals' workout.

Students will analyze dynamic balance exercises to determine their validity for their individual fitness goals.

Students will develop an understanding of individual dynamic balance exercises.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Students will implement dynamic balance exercises to their individual fitness goals.

Students will demonstrate competency in multiple dynamic balance exercises.

Students will apply dynamic balance exercises to impact their performance.

Assessment: Performance

Topic: Static Balance

Duration: Ongoing

Topical Essential Question(s) Covered

How can static balance impact athletic performance and daily activities?

Topical Vocabulary

static balance

plank position

side plank

bridge

modified plank

Learning Targets

Students will analyze individual movements related to static balance.

Students will evaluate the impact of static balance on their individual fitness.

Students will understand how static balance allows for improved fitness performance.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Students will consistently evaluate the impact of static balance exercises on their individual levels.

Students will analyze individual static balances exercises.

Knowledge Comprehension Application Analysis\Synthesis\Evaluation

Assessment: Performance

Resistance Training 3 Lifelong Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Course Description

This course will explore and analyze a variety of workouts pertaining to flexibility and plyometrics. Students will be introduced to different plyometric drills, activities and routines. Students will explore dynamics of stretching/flexibility using yoga, Pilates and various fitness equipment.

Scope And Sequence

Timeframe	Unit	Instructional Topics
Ongoing	Flexibility	
Ongoing	Plyometrics	

Course Details

Unit: Flexibility

Duration: Ongoing

Overarching Essential Question(s) Covered

- How does participating in yoga activities increase your flexibility?
- What affect does your level of flexibility have on your ability to carry out daily activities?
- What is the difference static and dynamic flexibility?

Academic Vocabulary

- analyze
- introduce
- connections
- impact
- meaning
- central idea
- development
- supporting

Content Specific Vocabulary

- static stretching
- dynamic stretching
- downward dog
- upward dog
- tree pose
- warrior I,II,III pose
- Child's pose
- triangle pose
- chair pose
- eagle pose

Topic:	Duration:
--------	-----------

Unit: Plyometrics

Duration: Ongoing

Resistance Training 3 Lifelong Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Overarching Essential Question(s) Covered

- What is plyometrics training?
- What are plyometric exercises?
- How do plyometric workouts improve athletic performance and individual workout plans?

Academic Vocabulary

- introduce
- connections
- develop
- analyze
- impact
- meaning
- cite
- inference
- evidence

Content Specific Vocabulary

- plyometrics
- stretch shortening cycle
- power development
- medicine ball throws
- plyometric push-up
- squat jumps
- tuck jumps
- split squat jumps
- box jumps
- drop jumps--high impact

Topic:	Duration:
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Resistance Training 3 - Lifelong Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5

Credits

Elective Course

Course Description

This course will provide students a variety of workouts using aerobic routines and body weight routines. Students will analyze how each of these routines will impact their athletic performance and/or individual fitness plans.

Scope And Sequence

Timeframe	Unit	Instructional Topics
Ongoing	Aerobic Routines	
Ongoing	Body Weight Routines	

Course Details

Unit: Aerobic Routines

Duration: Ongoing

Overarching Essential Question(s) Covered

Will aerobic exercises provide me with a better workout than anaerobic exercises?

Can you elevate the heart rate through continuous aerobic activity?

Can you increase your aerobic activity level to attain target heart rate?

Academic Vocabulary

connections

evidence

infer

determine

analyze

inference

Content Specific Vocabulary

aerobic activity

interval training

target heart rate zone

cardiorespiratory endurance

resting heart rate

pulse

sedentary

duration

frequency

F.I.T.T. Principle

Topic:

Duration:

Unit: Body Weight Routines

Duration: Ongoing

Overarching Essential Question(s) Covered

What are body weight exercises?

What components of fitness can be improved using body weight routines?

Academic Vocabulary

analysis

connections

inference introduce

specific

comprehend

concept

theme

distinction

Content Specific Vocabulary

muscular endurance

flexibility

cardiovascular endurance

body composition

push-ups

pull-ups

squats

planks

split squats

Topic:

Duration:

Resistance Training 3 - Lifelong Fitness

Physical Education/Health/Drivers Education

Grade(s) 10th - 12th, Duration 1 Semester, .5
Credits
Elective Course

Students

Health, Eye, and Dental Examinations; Immunizations; and Exclusion of Students

Required Health Examinations and Immunizations

A student's parent(s)/guardian(s) shall present proof that the student received a health examination, with proof of the immunizations against, and screenings for, preventable communicable diseases, as required by the Illinois Department of Public Health, within one year prior to:

1. Entering kindergarten or the first grade;
2. Entering the sixth and ninth grades; and
3. Enrolling in an Illinois school, regardless of the student's grade (including nursery school, special education, Head Start programs operated by elementary or secondary schools, and students transferring into Illinois from out-of-state or out-of-country).

Proof of immunization against meningococcal disease is required from students in grades 6 and 12, beginning with the 2015-2016 school year.

As required by State law:

1. Health examinations must be performed by a physician licensed to practice medicine in all of its branches, an advanced practice nurse who has a written collaborative agreement with a collaborating physician authorizing the advanced practice nurse to perform health examinations, or a physician assistant who has been delegated the performance of health examinations by a supervising physician. A diabetes screening must be included as a required part of each health examination; diabetes testing is not required.
2. Before admission and in conjunction with required physical examinations, parents/guardians of children between the ages of 6 months and 6 years must provide a statement from a physician that their child was "risk-assessed" or screened for lead poisoning.
3. The Department of Public Health will provide all female students entering sixth grade and their parents/guardians information about the link between human papilloma virus (HPV) and cervical cancer and the availability of the HPV vaccine.
4. Unless an exemption or extension applies, the failure to comply with the above requirements by October 15 of the current school year will result in the student's exclusion from school until the required health forms are presented to the District. New students who register after October 15 of the current school year shall have 30 days following registration to comply with the health examination and immunization regulations. If a medical reason prevents a student from receiving a required immunization by October 15, the student must present, by October 15, an immunization schedule and a statement of the medical reasons causing the delay. The schedule and statement of medical reasons must be signed by the physician, advanced practice nurse, physician assistant, or local health department responsible for administering the immunizations.

A student transferring from out-of-state who does not have the required proof of immunizations by October 15 may attend classes only if he or she has proof that an appointment for the required vaccinations is scheduled with a party authorized to submit proof of the required vaccinations. If the required proof of vaccination is not submitted within 30 days after the student is permitted to attend classes, the student may no longer attend classes until proof of the vaccinations is properly submitted.

Eye Examination

Parents/guardians are encouraged to have their children undergo an eye examination whenever health examinations are required.

Parents/guardians of students entering kindergarten or an Illinois school for the first time shall present proof before October 15 of the current school year that the student received an eye examination within one year prior to entry of kindergarten or the school. A physician licensed to practice medicine in all of its branches or a licensed optometrist must perform the required eye examination.

If a student fails to present proof by October 15, the school may hold the student's report card until the student presents proof: (1) of a completed eye examination, or (2) that an eye examination will take place within 60 days after October 15. The Superintendent or designee shall ensure that parents/guardians are notified of this eye examination requirement in compliance with the rules of the Department of Public Health. Schools shall not exclude a student from attending school due to failure to obtain an eye examination.

Dental Examination

All children in kindergarten and the second and sixth grades must present proof of having been examined by a licensed dentist before May 15 of the current school year in accordance with rules adopted by the Illinois Department of Public Health.

If a child in the second or sixth grade fails to present proof by May 15, the school may hold the child's report card until the child presents proof: (1) of a completed dental examination, or (2) that a dental examination will take place within 60 days after May 15. The Superintendent or designee shall ensure that parents/guardians are notified of this dental examination requirement at least 60 days before May 15 of each school year.

Exemptions

In accordance with rules adopted by the Illinois Department of Public Health, a student will be exempted from this policy's requirements for:

1. Religious or medical grounds if the student's parents/guardians present to the Superintendent a signed statement explaining the objection;
2. Health examination or immunization requirements on medical grounds if a physician provides written verification;
3. Eye examination requirement if the student's parents/guardians show an undue burden or lack of access to a physician licensed to practice medicine in all of its branches who provides eye examinations or a licensed optometrist; or
4. Dental examination requirement if the student's parents/guardians show an undue burden or a lack of access to a dentist.

Homeless Child

Any homeless child shall be immediately admitted, even if the child or child's parent/guardian is unable to produce immunization and health records normally required for enrollment. School Board policy 6:140, *Education of Homeless Children*, governs the enrollment of homeless children.

LEGAL REF.: McKinney Homeless Assistance Act, 42 U.S.C. §11431 et seq.
105 ILCS 5/27-8.1 and 45/1-20.
410 ILCS 45/7.1 and 315/2e.
23 Ill.Admin.Code §1.530.
77 Ill.Admin.Code Part 665.
77 Ill.Admin.Code Part 695.

CROSS REF.: 6:30 (Organization of Instruction), 6:140 (Education of Homeless Children),
6:180 (Extended Instructional Programs), 7:50 (School Admissions and Student
Transfers To and From Non-District Schools)

Students

Prevention of and Response to Bullying, Intimidation, and Harassment

Bullying, intimidation, and harassment diminish a student's ability to learn and a school's ability to educate. Preventing students from engaging in these disruptive behaviors and providing all students equal access to a safe, non-hostile learning environment are important District goals.

Bullying on the basis of actual or perceived race, color, national origin, military status, unfavorable discharge status from the military service, sex, sexual orientation, gender identity, gender-related identity or expression, ancestry, age, religion, physical or mental disability, order of protection status, status of being homeless, or actual or potential marital or parental status, including pregnancy, association with a person or group with one or more of the aforementioned actual or perceived characteristics, or any other distinguishing characteristic **is prohibited** in each of the following situations:

1. During any school-sponsored education program or activity.
2. While in school, on school property, on school buses or other school vehicles, at designated school bus stops waiting for the school bus, or at school-sponsored or school-sanctioned events or activities.
3. Through the transmission of information from a school computer, a school computer network, or other similar electronic school equipment.
4. Through the transmission of information from a computer that is accessed at a nonschool-related location, activity, function, or program or from the use of technology or an electronic device that is not owned, leased, or used by the School District or school if the bullying causes a substantial disruption to the educational process or orderly operation of a school. This paragraph (item #4) applies only when a school administrator or teacher receives a report that bullying through this means has occurred; it does not require staff members to monitor any nonschool-related activity, function, or program.

Definitions from Section 27-23.7 of the School Code (105 ILCS 5/27-23.7)

Bullying includes *cyber-bullying* and means any severe or pervasive physical or verbal act or conduct, including communications made in writing or electronically, directed toward a student or students that has or can be reasonably predicted to have the effect of one or more of the following:

1. Placing the student or students in reasonable fear of harm to the student's or students' person or property;
2. Causing a substantially detrimental effect on the student's or students' physical or mental health;
3. Substantially interfering with the student's or students' academic performance; or
4. Substantially interfering with the student's or students' ability to participate in or benefit from the services, activities, or privileges provided by a school.

Cyber-bullying means bullying through the use of technology or any electronic communication, including without limitation any transfer of signs, signals, writing, images, sounds, data, or intelligence of any nature transmitted in whole or in part by a wire, radio, electromagnetic system, photo-electronic system, or photo-optical system, including without limitation electronic mail, Internet communications, instant messages, or facsimile communications. *Cyber-bullying* includes the creation of a webpage or weblog in which the creator assumes the identity of another person or the knowing impersonation of another person as the author of posted content or messages if the creation

or impersonation creates any of the effects enumerated in the definition of *bullying*. *Cyber-bullying* also includes the distribution by electronic means of a communication to more than one person or the posting of material on an electronic medium that may be accessed by one or more persons if the distribution or posting creates any of the effects enumerated in the definition of *bullying*.

Restorative measures means a continuum of school-based alternatives to exclusionary discipline, such as suspensions and expulsions, that: (i) are adapted to the particular needs of the school and community, (ii) contribute to maintaining school safety, (iii) protect the integrity of a positive and productive learning climate, (iv) teach students the personal and interpersonal skills they will need to be successful in school and society, (v) serve to build and restore relationships among students, families, schools, and communities, and (vi) reduce the likelihood of future disruption by balancing accountability with an understanding of students' behavioral health needs in order to keep students in school.

School personnel means persons employed by, on contract with, or who volunteer in a school district, including without limitation school and school district administrators, teachers, school guidance counselors, school social workers, school counselors, school psychologists, school nurses, cafeteria workers, custodians, bus drivers, school resource officers, and security guards.

Bullying Prevention and Response Plan

The Superintendent or designee shall develop and maintain a bullying prevention and response plan that advances the District's goal of providing all students with a safe learning environment free of bullying and harassment. This plan must be consistent with the requirements listed below; each numbered requirement, 1-12, corresponds with the same number in the list of required policy components in 105 ILCS 5/27-23.7(b) 1-12.

1. The District uses the definition of *bullying* as provided in this policy.
2. Bullying is contrary to State law and the policy of this District. However, nothing in the District's bullying prevention and response plan is intended to infringe upon any right to exercise free expression or the free exercise of religion or religiously based views protected under the First Amendment to the U.S. Constitution or under Section 3 of Article I of the Illinois Constitution.
3. Students are encouraged to immediately report bullying. A report may be made orally or in writing to the District Complaint Manager or any staff member with whom the student is comfortable speaking. Anyone, including staff members and parents/guardians, who has information about actual or threatened bullying is encouraged to report it to the District Complaint Manager or any staff member. Anonymous reports are also accepted.

Complaint Manager:

Esther Mongan

Name

275 South St., P.O. Box 396, Burlington, IL
60109

Address

emongan@burlington.k12.il.us

Email

847-464-6005

Telephone

4. Consistent with federal and State laws and rules governing student privacy rights, the Superintendent or designee shall promptly inform the parent(s)/guardian(s) of every student involved in an alleged incident of bullying and discuss, as appropriate, the availability of

social work services, counseling, school psychological services, other interventions, and restorative measures.

5. The Superintendent or designee shall promptly investigate and address reports of bullying, by, among other things:
 - a. Making all reasonable efforts to complete the investigation within 10 school days after the date the report of a bullying incident was received and taking into consideration additional relevant information received during the course of the investigation about the reported bullying incident.
 - b. Involving appropriate school support personnel and other staff persons with knowledge, experience, and training on bullying prevention, as deemed appropriate, in the investigation process.
 - c. Notifying the Building Principal or school administrator or designee of the reported incident of bullying as soon as possible after the report is received.
 - d. Consistent with federal and State laws and rules governing student privacy rights, providing parents/guardians of the students who are parties to the investigation information about the investigation and an opportunity to meet with the Building Principal or school administrator or his or her designee to discuss the investigation, the findings of the investigation, and the actions taken to address the reported incident of bullying.

The Superintendent or designee shall investigate whether a reported incident of bullying is within the permissible scope of the District's jurisdiction and shall require that the District provide the victim with information regarding services that are available within the District and community, such as counseling, support services, and other programs.

6. The Superintendent or designee shall use interventions to address bullying, that may include, but are not limited to, school social work services, restorative measures, social-emotional skill building, counseling, school psychological services, and community-based services.
7. A reprisal or retaliation against any person who reports an act of bullying **is prohibited**. A student's act of reprisal or retaliation will be treated as *bullying* for purposes of determining any consequences or other appropriate remedial actions.
8. A student will not be punished for reporting bullying or supplying information, even if the District's investigation concludes that no bullying occurred. However, knowingly making a false accusation or providing knowingly false information will be treated as *bullying* for purposes of determining any consequences or other appropriate remedial actions.
9. The District's bullying prevention and response plan must be based on the engagement of a range of school stakeholders, including students and parents/guardians.
10. The Superintendent or designee shall post this policy on the District's Internet website, if any, and include it in the student handbook, and, where applicable, post it where other policies, rules, and standards of conduct are currently posted. The policy must also be distributed annually to parents/guardians, students, and school personnel, including new employees when hired.
11. The Superintendent or designee shall assist the Board with its evaluation and assessment of this policy's outcomes and effectiveness. This process shall include, without limitation:
 - a. The frequency of victimization;
 - b. Student, staff, and family observations of safety at a school;
 - c. Identification of areas of a school where bullying occurs;

- d. The types of bullying utilized; and
- e. Bystander intervention or participation.

The evaluation process may use relevant data and information that the District already collects for other purposes. The Superintendent or designee must post the information developed as a result of the policy evaluation on the District's website, or if a website is not available, the information must be provided to school administrators, Board members, school personnel, parents/guardians, and students.

12. The Superintendent or designee shall fully implement the Board policies, including without limitation, the following:
 - a. 2:260, *Uniform Grievance Procedure*. A student may use this policy to complain about bullying.
 - b. 6:60, *Curriculum Content*. Bullying prevention and character instruction is provided in all grades in accordance with State law.
 - c. 6:65, *Student Social and Emotional Development*. Student social and emotional development is incorporated into the District's educational program as required by State law.
 - d. 6:235, *Access to Electronic Networks*. This policy states that the use of the District's electronic networks is limited to: (1) support of education and/or research, or (2) a legitimate business use.
 - e. 7:20, *Harassment of Students Prohibited*. This policy prohibits any person from harassing, intimidating, or bullying a student based on an identified actual or perceived characteristic (the list of characteristics in 7:20 is the same as the list in this policy).
 - f. 7:185, *Teen Dating Violence Prohibited*. This policy prohibits teen dating violence on school property, at school sponsored activities, and in vehicles used for school-provided transportation.
 - g. 7:190, *Student Discipline*. This policy prohibits, and provides consequences for, hazing, bullying, or other aggressive behaviors, or urging other students to engage in such conduct.
 - h. 7:310, *Restrictions on Publications*. This policy prohibits students from and provides consequences for: (1) accessing and/or distributing at school any written, printed, or electronic material, including material from the Internet, that will cause substantial disruption of the proper and orderly operation and discipline of the school or school activities, and (2) creating and/or distributing written, printed, or electronic material, including photographic material and blogs, that causes substantial disruption to school operations or interferes with the rights of other students or staff members.

LEGAL REF.: 405 ILCS 49/, Children's Mental Health Act.
 105 ILCS 5/10-20.14, 5/24-24, and 5/27-23.7.
 23 Ill.Admin.Code §§1.240 and §1.280.

CROSS REF.: 2:240 (Board Policy Development), 2:260 (Uniform Grievance Procedure), 4:170 (Safety), 5:230 (Maintaining Student Discipline), 6:60 (Curriculum Content), 6:65 (Student Social and Emotional Development), 6:235 (Access to Electronic Networks), 7:20 (Harassment of Students Prohibited), 7:185 (Teen Dating Violence Prohibited), 7:190 (Student Discipline), 7:220 (Bus Conduct), 7:230 (Misconduct by Students with Disabilities), 7:240 (Conduct Code for Participants in Extracurricular Activities), 7:285 (Food Allergy Management Program), 7:310 (Restrictions on Publications)

District 301 5Essentials Survey

Survey Response Rates

Schools with Reports	Student Rate	Teacher Rate	Parent Rate
<u>Central High School</u>	83.3	75.7	6.2
<u>Central Middle School</u>	91.9	94.7	20.2
<u>Country Trails Elem</u>	0.0	89.7	30.3
<u>Howard B Thomas Grade School</u>	0.0	69.4	31.8
<u>Lily Lake Grade School</u>	0.0	99.9	32.7
<u>Prairie Knolls Middle Sch</u>	99.9	99.9	33.7
<u>Prairie View Grade School</u>	0.0	92.3	35.1

Effective Leaders

Principal Instructional Leadership

What are these results based on?

Q1. Participates in instructional planning with teams of teachers.

Q2. Knows what's going on in my classroom

Q3. Carefully tracks student academic progress.

Q4. Understands how children learn.

Q5. Presses teachers to implement what they have learned in professional development.

Q6. Communicates a clear vision for our school.

Q7. Sets high standards for student learning.

Q8. Makes clear to the staff his or her expectations for meeting instructional goals.

Score	School
25	CHS
63	CMS
57	CT
30	HBT
68	LL
72	PKMS
58	PV

Teacher Influence

Q1. Planning how discretionary school funds should be used.

Q2. Determining books and other instructional materials used in classrooms.

Q3. Setting standards for student behavior.

Q4. Establishing the curriculum and instructional program.

Q5. Determining the content of in-service programs.

Score	School
30	CHS
54	CMS
77	CT
34	HBT
75	LL
80	PKMS
59	PV

Program Coherence

Q1. Many special programs come and go at this school.

Q2. Once we start a new program, we follow up to make sure that it's working.

Q3. Curriculum, instruction, and learning materials are well coordinated across the different grade levels at this school.

Q4. We have so many different programs in this school that I can't keep track of them all.

Q5. There is consistency in curriculum, instruction, and learning materials among teachers in the same grade level at this school.

Score	School
23	CHS
65	CMS
89	CT
50	HBT
80	LL
97	PKMS
64	PV

Teacher-Principal Trust

Q1. It's OK in this school to discuss feelings, worries, and frustrations with the principal.

Q2. The principal looks out for the personal welfare of the faculty members.

Q3. I trust the principal at his or her word.

Q4. The principal at this school is an effective manager who makes the school run smoothly.

Q5. The principal places the needs of children ahead of personal and political interests.

Q6. The principal has confidence in the expertise of the teachers.

Q7. The principal takes a personal interest in the professional development of teachers.

Q8. Teachers feel respected by the principal

Score	School
19	CHS
60	CMS
60	CT
21	HBT
54	LL
71	PKMS
58	PV

Collaborative Teachers

Collective Responsibility

Q1. Feel responsible when students in this school fail.

Q2. Feel responsible to help each other do their best.

Q3. Help maintain discipline in the entire school, not just their classroom.

Q4. Take responsibility for improving the school.

Q5. Feel responsible for helping students develop self-control.

Q6. Feel responsible that all students learn.

Score	School
32	CHS
68	CMS
68	CT
60	HBT
93	LL
92	PKMS
53	PV

Quality Professional Development

Q1. Included opportunities to work productively with teachers from other schools.

Q2. Included enough time to think carefully about, try, and evaluate new ideas.

Q3. Been sustained and coherently focused, rather than short-term and unrelated.

Q4. Included opportunities to work productively with colleagues in my school.

Q5. Been closely connected to my school's improvement plan.

Score	School
31	CHS
52	CMS
83	CT
47	HBT
52	LL
87	PKMS
65	PV

School Commitment

Q1. I wouldn't want to work in any other school.

Q2. I would recommend this school to parents seeking a place for their child.

Q3. I usually look forward to each working day at this school.

Q4. I feel loyal to this school.

Score	School
18	CHS
58	CMS
72	CT
37	HBT
78	LL
77	PKMS
68	PV

Teacher-Teacher Trust

Q1. Teachers in this school trust each other.

Q2. It's OK in this school to discuss feelings, worries, and frustrations with other teachers.

Q3. Teachers respect other teachers who take the lead in school improvement efforts.

Q4. Teachers at this school respect those colleagues who are experts at their craft.

Q5. Teachers feel respected by other teachers

Score	School
15	CHS
49	CMS
50	CT
76	HBT
97	LL
84	PKMS
50	PV

Involved Families

Outreach to Parents

Q1. Teachers work closely with parents to meet students' needs.

Q2. This school regularly communicates with parents about how they can help their children learn.

Q3. The principal pushes teachers to communicate regularly with parents.

Q4. Teachers really try to understand parents' problems and concerns.

Q5. Parents are greeted warmly when they call or visit the school.

Score	School
45	CHS
83	CMS
92	CT
56	HBT
90	LL
81	PKMS
80	PV

Teacher-Parent Trust

Q1. Parents do their best to help their children learn

Q2. Teachers feel good about parents' support for their work

Q3. Parents support teachers teaching efforts

Q4. Teachers and parents think of each other as partners in educating children.

Q5. Staff at this school work hard to build trusting relationships with parents.

Q6. Teachers feel respected by the parents of the students

Score	School
47	CHS
73	CMS
98	CT
85	HBT
93	LL
89	PKMS
93	PV

Parent Involvement in School

Q1. Volunteered time to support the school (e.g., volunteer in classrooms, help with school-wide events, etc.)

Q2. Contacted me about their child's performance.

Q3. Respond to my suggestions for helping their child.

Q4. Attended parent-teacher conferences when you requested them.

Score	School
35	CHS
48	CMS
87	CT
73	HBT
78	LL
53	PKMS
85	PV

Supportive Environment

Peer Support for Academic Work

Q1. Think doing homework is important.

Q2. Feel it is important to pay attention in class.

Q3. Feel it is important to come to school every day.

Q4. Try hard to get good grades.

Score	School
	CHS
44	CMS
	CT
	HBT
	LL
76	PKMS
	PV

Academic Personalism

Q1. Helps me catch up if I am behind.

Q2. Notices if I have trouble learning something.

Q3. Gives me specific suggestions about how I can improve my work in this class.

Q4. Is willing to give extra help on schoolwork if I need it.

Q5. Explains things in a different way if I don't understand something in class.

Score	School
43	CHS
34	CMS
	CT
	HBT
	LL
67	PKMS
	PV

Academic Press

Q1. The teacher asks difficult questions in class

Q2. The teacher asks difficult questions on tests

Q3. This class challenges me

Q4. This class really makes me think.

Q5. I really learn a lot in this class

Q6. This class requires me to work hard to do well

Q7. The teacher wants us to become better thinkers, not just memorize things

Q8. The teacher expects me to do my best all the time

Q9. The teacher expects everyone to work hard

Score	School
46	CHS
41	CMS
	CT
	HBT
	LL
80	PKMS
	PV

Safety

Q1. Outside around the school.

Q2. Traveling between home and school.

Q3. In the hallways and bathrooms of the school.

Q4. In their classes

Score	School
70	CHS
69	CMS
	CT
	HBT
	LL
68	PKMS
	PV

School-Wide Future Orientation

Q1. Teachers work hard to make sure that students stay in school.

Q2. Teachers pay attention to all students, not just the top students.

Q3. Teachers make sure that all students are planning for life after graduation.

Q4. Teachers work hard to make sure that all students are learning.

Q5. All students are encouraged to go to college.

Q6. High school is seen as preparation for the future.

Score	School
44	CHS
	CMS
	CT
	HBT
	LL
	PKMS
	PV

Student-Teacher Trust

- Q1. My teachers always keep their promises
- Q2. I feel safe and comfortable with my teachers at this school.
- Q3. My teachers will listen to students' ideas.
- Q4. My teachers treat me with respect.

Score	School
62	CHS
54	CMS
	CT
	HBT
	LL
98	PKMS
	PV

Expectations for Postsecondary Education

Q1. Most of the students in this school are planning to go to college.

Q2. Teachers expect most students in this school to go to college.

Q3. Teachers at this school help students plan for college outside of class time.

Q4. The curriculum at this school is focused on helping students get ready for college.

Q5. Teachers in this school feel that it is a part of their job to prepare students to succeed in college.

Score	School
60	CHS
	CMS
	CT
	HBT
	LL
	PKMS
	PV

Ambitious Instruction

Course Clarity

What are these results based on?

Q1. I learn a lot from feedback on my work.

Q2. The homework assignments help me to learn the course material.

Q3. The work we do in class is good preparation for the test.

Q4. I know what my teacher wants me to learn in this class.

Q5. It's clear to me what I need to do to get a good grade.

Score	School
33	CHS
23	CMS
	CT
	HBT
	LL
81	PKMS
	PV

English Instruction

What are these results based on?

Q1. Rewrite a paper or essay in response to comments.

Q2. Improve a piece of writing as a class or with partners.

Q3. Debate the meaning of a reading.

Q4. Discuss how culture, time, or place affects an author's writing.

Q5. Discuss connections between a reading and real life people or situations.

Q6. Explain how writers use tools like symbolism and metaphor to communicate meaning.

Score	School
60	CHS
29	CMS
	CT
	HBT
	LL
52	PKMS
	PV

Math Instruction

What are these results based on?

Q1. Write a math problem for other students to solve.

Q2. Write a few sentences to explain how you solved a math problem.

Q3. Apply math to situations in life outside of school.

Q4. Solve a problem with multiple steps that takes more than 20 minutes.

Q5. Explain how you solved a problem to the class.

Q6. Discuss possible solutions to problems with other students.

Score	School
28	CHS
36	CMS
	CT
	HBT
	LL
99	PKMS
	PV

Quality of Student Discussion

What are these results based on?

Q1. Students use data and text references to support their ideas.

Q2. Students provide constructive feedback to their peers and to me.

Q3. Students build on each other's ideas during discussion.

Q4. Most students participate in the discussion at some point.

Q5. Students show each other respect.

Score	School
52	CHS
68	CMS
98	CT
74	HBT
	LL
82	PKMS
97	PV

Teacher/Student Measures

Teacher Measures

Measure	Performance
The principal is an active and skilled instructional leader who sets high standards for teaching and student learning.	53
School programs are coordinated and consistent with its goals for student learning.	67
Teachers have influence in a broad range of decisions regarding school policies and practices.	58
Teachers and principals share a high level of mutual trust and respect.	49
Teachers share a strong sense of responsibility for student development, school improvement, and professional growth.	67
Professional development is rigorous and focused on student learning.	60
Teachers are deeply committed to the school.	58
Teachers are supportive and respectful of one another, personally and professionally.	60
The school creates a welcoming and communicative environment for all parents.	75

Teacher Measures

Measure	Performance
Parents are active participants in their child's schooling.	66
Teachers and parents are partners in improving student learning.	83
The school expects all students to attend college and promotes college-readiness.	60
Students participate in classroom discussions that build their critical thinking skills.	79
New teachers are included in the professional community and are given helpful feedback on their instructional practices.	67
Students are active participants in their own learning and regularly attend class prepared to learn.	86
Teachers observe each others' practice and work together to review assessment data and develop instructional strategies.	74
Teachers report little or no disorder in the hallways, physical conflict among students, vandalism, robbery or theft, and threats of violence against teachers.	67

Student Measures

Measure	Performance
Teachers connect with students in the classroom and support them in achieving academic goals.	48
Teachers expect students to do their best and to meet academic demands	56
Students demonstrate behaviors that lead to academic achievement.	60
Students feel safe both in and around the school building, and while they travel to and from home	69
The school engages all students in planning for life after graduation.	44
Students and teachers share a high level of mutual trust and respect.	71
Students are provided clear learning goals and instruction that supports achievement.	46
Students interact with course material and one another to build and apply knowledge in their math classes.	47
Students are interested and engaged in learning	34
Students come from communities where there are adults they can trust who provide a safe environment.	75

Student Measures

Measure	Performance
Students interact with course material and one another to build and apply knowledge in their math classes.	54
Students set aside time for schoolwork and give priority to studying.	58
Students treat each other with respect, work well together, and help each other learn.	62