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| Computer Information Systems | | |
| Description  Students will achieve proficiency in the following applications: Advanced Word Processing, Spreadsheets, Databases, Responsible Internet Use, Movie-Making software and Presentation Programs. The self-paced nature of this course allows the student to work independently at various levels of proficiency. | | |
| Course Overview | | |
| Course Goals  Students will   * Create, edit and format a word processing document * Create and manipulate tables * Enhance documents on a global scale * Plan and design a spreadsheet * Edit and format a spreadsheet * Formulate, enhance and annotate a chart * Implement advanced spreadsheet features (including absolute and relative cell referencing/conditional formatting advanced cell reference formulation) * Demonstrate an understanding of database terminology * Plan, create and design databases, tables and queries * Plan, create and modify database form * Plan and create an effective multimedia presentation * Use presentation software to enhance their ideas clearly and effectively * Manipulate multimedia using visual elements * Fine tune their multimedia by embedding charts, inserting graphics and animation effects * Identify social and civic responsibilities on the internet * Recognize the legal and ethical issues related to the internet | Essential Questions   * How to use technology as a tool to research and organize information in the real-world and academic settings? * How to communicate information clearly and effectively using a variety of multimedia tools? * What are the legal and ethical issues related to technology and internet use? * How to use technology and communication tools appropriately and effectively? | Assessments  Common Assessments   * Cumulative Portfolio   Skill Assessments   * Assignments & Exams |
| Content Outline   1. [Unit 1](#UnitI) 2. [Unit 2](#UnitII) 3. [Unit 3](#UnitIII) 4. [Unit 4](#UnitIV) 5. [Unit 5](#UnitV) 6. [Unit 6](#UnitVI) 7. Unit 7 | Standards  [State of Connecticut Curriculum Frameworks](http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320866)  21st Century Skills/International Society for Technology in Education | |

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| |  |  | | --- | --- | | **Pacing Guide** | | | 1st Marking Period | 2nd Marking Period | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Month 1 | Month 2 | Month 3 | Month 4 | Month 5 | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Unit 1  Word Processing Software  3 weeks | Unit 2  [Spreadsheet Software](#UnitII)  3 weeks | Unit 3  Database Management Software  2 weeks | Unit 4  [Internet Safety/ Social Media](#UnitIV)  2 weeks | Unit 5  Movie-Making Software  2 weeks | Unit 6  Publishing Software  2 weeks | Unit 7  Presentation Software  4 weeks | |

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| Unit 1 - Word Processing Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  Connecticut Career and Technical Education  4. Manage files and folders.  8. Create and present multi-media using word processing and presentation software.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Generate, edit and format multiple types of documents such as simple business letters, research papers, newsletters and resumes. * Proof, edit and prepare a document for distribution. * Format a document to enhance the appearance, create visual impact and help illustrate the document’s structure. | Focus Questions   * What is a word processing program and what are its functions? * How can word processing software be used to create multiple types of documents? * How can word processing software be used to revise and polish a document? * How can formatting be applied in order to enhance the appearance of a document, create visual impact, and help illustrate a document’s structure? | Assessment   * Create a business letter * Newsletter * Create and format a chart * Assignments & Exams |
| Skill Objectives  Students will   * Identify the functions of the word processing software, as well as elements of the program. * Format text using a mini toolbar. * Create a document using a template. * Create and manipulate tables. * Cut copy and paste text using the clipboard function. * Find and replace text. * Add hyperlinks. * Change line and paragraph spacing. * Utilize tabs, indents, bullets, numbering, borders, shading, footnotes and endnotes. * Divide documents into sections, insert page breaks and format columns within sections. * Insert page numbers, images, headers and footers. | | |
| Technology Resources   * Computers with Windows * Software: word processing, spreadsheet, database, presentation * Internet | Suggested Materials/Resources   * Textbooks and workbooks | |

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| Unit 2 – Spreadsheet Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  5. Effectively apply the analysis, synthesis, and evaluative processes that enable productive problem solving.  Connecticut Career and Technical Education  4. Manage files and folders.  8. Create and present multi-media using word processing and presentation software.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Create spreadsheets and charts with the use of annotation and formulation. * Comprehensively use spreadsheet software to organize and present numerical data. * Choose the most relevant chart for the given data that will most effectively display the data being charted. * Format graphs with relevant labels and information. | Focus Question   * How can a spreadsheet/chart be effectively designed, formatted, enhanced, annotated, and calculated? * When is it appropriate to present information in a chart form rather than a written form? * When is it appropriate to use different types of charts? * How to include and/or edit data labels, a chart title, and a legend within a chart. | Assessments   * Create a table * Create and format a chart |
| Skill Objectives  Students will   * Plan and design a spreadsheet. * Edit and format a spreadsheet. * Formulate, enhance and annotate a chart. * Enter and edit a simple formula. * Switch worksheet views and choose print options. * Implement advanced spreadsheet features (including absolute and relative cell referencing/conditional formatting advanced cell reference formulation). | | |
| Technology Resources   * Computers with Windows * Software: word processing, spreadsheet, database, presentation * Internet | Suggested Materials/Resources   * Supplemental Resources * Department created Presentations | |

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| Unit 3 – Database Management Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  5. Effectively apply the analysis, synthesis, and evaluative processes that enable productive problem solving.  Connecticut Career and Technical Education  4. Manage files and folders.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Demonstrate an understanding of database terminology * Plan, create and design databases, tables and queries | Focus Questions   * How do you create and modify tables? * How do you navigate, enter, update, preview and print data in a database? | Assessments   * Create a database * Create & design a query |
| Skill Objectives  Students will   * Learn to create a database * Relate tables * Print a Datasheet * Create & design a query | | |
| Technology Resources   * Computers with Windows * Software: word processing, spreadsheet, database, presentation * Internet | Suggested Materials/Resources   * Supplemental Resources * Department created Presentations | |

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| Unit 4 – Internet Safety/ Social Media | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  2. Work independently and collaboratively to solve problems and accomplish goals.  5. Effectively apply the analysis, synthesis, and evaluative processes that enable productive problem solving.  6. Value and demonstrate personal responsibility, character, cultural understanding and ethical behavior.  Connecticut Career and Technical Education  1. Describe the impact of technology on the knowledge and skills needed for success in the workplace.  17. Identify and discuss privacy issues within an organization. | | |
| Unit Objectives  Students will   * Understand how media messages are constructed and for what purposes * Understand the ethical and legal issues related to the internet * Explain positive benefits, as well as possible risks of the internet and the social media | Focus Question   * How do use the internet and social media in an appropriate manner? * What are the legal and ethical issues involved with the internet and social media? * What are your resources for help if you are a victim of an internet crime | Assessments   * Case Study |
| Skill Objectives  Students will   * Learn the rules of Smart Surfing * Know how to handle situations involving Cyber Bullying, Cyber stalking, and Cyber Harassment. * Identify Online Annoyances * Protect themselves from Internet Viruses * Understand the Importance of Internet Safety * What can you do to minimize the chances of being an online victim * Review types of Social Media and how it should be appropriately used. | | |
| Technology Resources   * Computers with Windows * Internet * Websites such as the following:   [www.fbi.gov](http://www.fbi.gov)  [www.isafe.org](http://www.isafe.org)  www.kidshealth.org | Suggested Materials/Resources   * Supplemental Resources * Department created Presentations | |

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| Unit 5 – Movie-Making Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  2. Work independently and collaborative to solve problems and accomplish goals.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  4. Demonstrate innovation, flexibility and adaptability in thinking patterns, work habits and working/learning conditions.  Connecticut Career and Technical Education  4. Manage files and folders.  8. Create and present multi-media using word processing and presentation software.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Produce a video using movie-making software * Use the basic editing functions * Create transitions * Add audio, effects, and titles | Focus Question   * How do you create a multimedia video? * How do you use the basic editing functions, create transitions, and add audio effects and titles? | Assessment   * Feature Video |
| Skill Objectives  Students will   * Capture new video or use previously downloaded video * Drag scenes into a storyboard or timeline * Build a library of audio, video, and still images * Make transitions, such as fades, dissolves, and wipes * Create titles, crawls, and credits * Amplify the presentation with narration, music, and sound effects * Use program to fine-tune your audio and video * Premiere the video during a class screening | | |
| Technology Resources   * Computers * Software: movie maker * Internet * Video Camera * Microphone | Suggested Materials/Resources   * Supplementary Materials * Internet Video Tutorials * Library Media materials * Department Created Presentations * iMovie or Microsoft MovieMaker | |

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| Unit 7 – Publishing Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  Connecticut Career and Technical Education  4. Manage files and folders.  8. Create and present multi-media using word processing and presentation software.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Transform ideas into a publication | Focus Question   * How do I transform ideas into a publication? | Assessments   * Publisher Brochure |
| Skill Objectives  Students will   * Place text in columns and manage text that does not fit all in one box * Insert a caption for a picture * Layer and group objects * Insert information from a data source | | |
| Technology Resources   * Computers * Publishing Software * Internet * Camera | Suggested Materials/Resources   * Supplemental Resources * Department created Presentations | |

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| Unit 7 – Presentation Software | | |
| Standards  21st Century Skills/International Society for Technology in Education  1. Use real-world digital and other research tools to access, evaluate and effectively apply information appropriate for authentic tasks.  3. Communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes.  Connecticut Career and Technical Education  4. Manage files and folders.  8. Create and present multi-media using word processing and presentation software.  9. Use word processing, desktop publishing, database, spreadsheet, presentation, and multimedia software to improve academic achievement across the curriculum. | | |
| Unit Objectives  Students will   * Plan and create an effective multimedia presentation * Manipulate multimedia using visual elements * Fine tune their multimedia by embedding charts, inserting graphics and animation effects * Transform ideas into a publication | Focus Question   * How do you create individual slides and display them as a slide show? * How do you enter slide text, add a new slide, and apply a design theme? * How to use visual elements, such as charts, graphic, and photographs to help communicate the presentation message? * How do I transform ideas into a publication? | Assessments   * PowerPoint Presentation * Publisher Brochure |
| Skill Objectives  Students will   * Choose appropriate slide transitions for a presentation * Modify a presentation * Place text in columns and manage text that does not fit all in one box * Insert a caption for a picture * Layer and group objects * Insert information from a data source | | |
| Technology Resources   * Computers * Software: word processing, spreadsheet, database, presentation * Internet * Camera | Suggested Materials/Resources   * Supplemental Resources * Department created Presentations | |