2019 Unit 1 - COMPUTER BASICS / DESKTOP PUB. / STEAM CONNECTIONS

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **3 weeks**
Status: **Published**

Transfer Goals and Career Ready Practices

Transfer Goals

- Students will be able to efficiently navigate through introductory software applications (outside of soon-to-come MS Office software)
- Students will be able to independently (& collaboratively, in some cases) use their learning to understand & troubleshoot challenges revolving around essential parts of a computer.
- Students will be able to properly organize their network drives and sub-folders, connecting this important skill and structure to daily work-flow/career-ready practices
- Students will be able to efficiently differentiate between soft-copy and hard-copy productions for instructional sharing purposes (cross-content connections to be established)
- Students will be able to produce basic Desktop Publishing documents (outside of MS Office software) for presentation purposes
- Students will be able to incorporate STEAM/STEM skills with problem-solving strategies and hands-on troubleshooting lessons/assessments/challenges

Standards

CS.9-12.8.1.12.CS.2	Model interactions between application software, system software, and hardware.
CS.9-12.8.1.12.CS.3	Compare the functions of application software, system software, and hardware.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
TECH.9.4.12.TL.1	Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).
TECH.9.4.12.TL.2	Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.
	Digital tools differ in features, capacities, and styles. Knowledge of different digital tools is helpful in selecting the best tool for a given task.
	A computing system involves interaction among the user, hardware, application software, and system software.
	Successful troubleshooting of complex problems involves multiple approaches including research, analysis, reflection, interaction with peers, and drawing on past experiences.

Essential Questions

- What are the essential pieces of hardware available to us and outside of our availability that are used in the business world?
- How has storage overall taken significant steps toward improvement over the last several decades?
- How/when are hard-copies more effective/useful VS soft-copy files?
- What makes an effective and dynamic presentation/document?
- How can we incorporate STEAM concepts into Comp. Apps. class and why is this a new(er) and significant requirement?
- What role can color and animation play in a presentation?
- What can Google Apps offer students of 2019 and beyond in terms of efficiency, sharing, collaboration, presenting well?

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
- Understanding the components of a computer allow for successful troubleshooting
- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
- Color schemes and digital presentation skills
- Desktop Publishing techniques

Skills

Students will be able to:

- Demonstrate networking abilities via organized drives and sub-folders
- Navigate through web resources and properly create Bookmarks/Favorites
- Display understanding of web etiquette and proper virtual behavior
- Create effective and dynamic publications (outside of soon-to-come MS Office software)
- Convert units of measurement within STEAM exercises
- Troubleshoot technological difficulties on their laptops operating system

Assessment and Resources

School Formative Assessment Plan (Other Evidence)
- Basics Graphics Blend - (freeware resource - LunaPic.com)
- PREZI Project - (freeware resource - Prezi.com)
- STEAM Project - (instructor owned supplies for students' use - Makey Makey Kits)
- Networking Folders Challenge
- Google Image Toolbars Challenge
- Text Editor Project - (free resource - FlamingText.com)
- Google Drawing - Canvas creation within Google Apps for Edu.
- Typing Speed Challenge (free web resource sites - FreeTypingGame.net)
- Getting to Know Your O.S. - (organizing Desktop layout and applying a custom wallpaper using LunaPic.com STEAM measurements)

School Summative Assessment Plan
Comprehensive Final Assessment (no MidTerm, as this a semester-based course)

Primary Resources
No formal textbook has been adopted for this course. Instructor has several years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Supplementary Resources

No formal textbook has been adopted for this course. Instructor has several years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

   ○ Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
   ○ GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

   ○ All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❏   Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❏   All assignments have been created in the student's native language.

❏   Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❏   Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❏   All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

- **MATH -** Hands-on measurement for STEAM exercises, record keeping, unit conversions for charting, proportions and spacing within Desktop Publishing lessons
- **ELA -** Demand for proper grammatical structure and spelling in all lessons and units
- **SCIENCE -** STEAM exercises connect computer science to engineering concepts
- **SOCIAL STUDIES -**
- **WORLD LANGUAGES -**
- **VISUAL/PERFORMING ARTS -**
- **APPLIED TECHNOLOGY -**
- **BUSINESS EDUCATION -** Technology tie-ins and connections to the business world / office settings
- **GLOBAL AWARENESS -**

Learning Plan / Pacing Guide

Week 1:

Introduction to hardware and networking abilities/permissions

Operating Systems

Proper typing instruction - Set up progress-tracking project

Week 2:

Hardware, Software, Storage

Basic graphics and web resources

Google Image Properties, Text Editors, and exploration of web graphics

Week 3:

Intro to Desktop Pub basics - Google Canvas, Prezi

STEAM connections with Comp. Sci and Engineering and Computations

List of Assessments:

- Basics Graphics Blend - (freeware resource - LunaPic.com)
- PREZI Project - (freeware resource - Prezi.com)
- STEAM Project - (instructor owned supplies for students' use - Makey Makey Kits)
- Networking Folders Challenge
- Google Image Toolbars Challenge
- Text Editor Project - (free resource - FlamingText.com)
- Google Drawing - Canvas creation within Google Apps for Edu.
- Typing Speed Challenge (free web resource sites - FreeTypingGame.net)
- Getting to Know Your O.S. - (organizing Desktop layout and applying a custom wallpaper using LunaPic.com STEAM measurements)

2019 Unit 2 - WORD

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **weeks**
Status: **Published**

Standards

Standards

- A computing system involves interaction among the user, hardware, application software, and system software.

- Successful troubleshooting of complex problems involves multiple approaches including research, analysis, reflection, interaction with peers, and drawing on past experiences.

- CS.9-12.8.1.12.CS.2   Model interactions between application software, system software, and hardware.

- CS.9-12.8.1.12.CS.3   Compare the functions of application software, system software, and hardware.

- TECH.9.4.12.CI.1   Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).

- TECH.9.4.12.TL.1   Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

- TECH.9.4.12.TL.2   Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.   0x   Digital tools differ in features, capacities, and styles. Knowledge of different digital tools is helpful in selecting the best tool for a given task.

Transfer Goals and Career Ready Practices

Transfer Goals

Students will be able to independently use their learning to use a word processing program, enabling them to, in the long-run,create professional documents effectively and efficiently.

Concepts

- Organization (custom bullets, A-Z sorting, table configuration, data inputting)
- Creative Layouts (page orientation, color scheme, transparency effects, rotations and #D beveling, etc.)
- Grammar (stressing crucial importance of proper spelling, structure, punctuation, etc.)

- Desktop Publishing (using effects and layout techniques to create dynamic docs)

Essential Questions

- How can new features and software updates in WORD make creating documents more efficient/effective?
- How can we make dynamic soft-copies and visually appeal hard-copies?
- How can we become better organized using WORD's features and applications?
- What role does formatting and structure play in the professional setting/world?
- How are graphics utilized in WORD, compared to previously learned sections (Google Apps, Web Browsers, etc.)

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
- Understanding the components of a computer allow for successful troubleshooting
- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
- Color schemes and digital presentation skills
- Desktopo Publishing techniques
- Organizational capabilities of MS Word
- Dynamic Funtionality of MS Word

Skills

Students will be able to:

Demontrate navigation and organizational techques on all top toolbars

Work with keyboard shortcuts

Create professional documents

Adhere to proper grammatical structure through Tech lessons

Assessment and Resources

School Formative Assessment Plan (Other Evidence)
- Customized Bullets Task
- Recipe Cookbook
- Schedule Creation
- School Events Pamphlet Challenge
- Web Page WORD Version Project
- Sports Card Creation Task
- Intro to Charting/Graphing Challenge
- Networking Project - (Prep for FINAL - last 2 weeks of course)

School Summative Assessment Plan

Comprehensive Final Assessment (no MidTerm, as this a semester-based course)

Primary Resources

No formal textbook has been adopted for this course. Instructor has several years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Supplementary Resources

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Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

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> o GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

> o All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❑ Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❑ All assignments have been created in the student's native language.

❑ Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❑ Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❑ Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❑ All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

MATH - Proportions as they relate to orientation and layouts within document-creation lessons

ELA - Demand for proper grammatical structure and spelling in all lessons and units

SCIENCE -

SOCIAL STUDIES -

WORLD LANGUAGES -

VISUAL/PERFORMING ARTS -

APPLIED TECHNOLOGY -

BUSINESS EDUCATION - Technology tie-ins and connections to the business world / office settings

GLOBAL AWARENESS -

Learning Plan / Pacing Guide

Week 1:

Interface introduction

Toolbar orientation and keyboard shortcut intro

Teach custome bullets and formal numbering system

Week 2:

Teach Tables and proper formatting with color options

Desktop Publishing lessons revolving around color scheme and professional layouts

Proper pasting techniques (text only VS all paste, and how those options affect MS Word pages)

Week 3:

Teach intranet VS internet as they relate to MS Word basic web page creation

Introduce networking and hyperlinking

Create interactive web pages to MS Word's (basic) extent and capabilities

List of Assessments:

- Customized Bullets Task
- Recipe Cookbook
- Schedule Creation
- School Events Pamphlet Challenge
- Web Page WORD Version Project
- Sports Card Creation Task
- Intro to Charting/Graphing Challenge
- Networking Project - (Prep for FINAL - last 2 weeks of course)

2019 Unit 3 - EXCEL

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **weeks**
Status: **Published**

Standards

Standards

- CS.9-12.8.1.12.CS.2   Model interactions between application software, system software, and hardware.

- CS.9-12.8.1.12.CS.3   Compare the functions of application software, system software, and hardware.   0x   Successful troubleshooting of complex problems involves multiple approaches including research, analysis, reflection, interaction with peers, and drawing on past experiences.   0x   A computing system involves interaction among the user, hardware, application software, and system software.

- TECH.9.4.12.CI.1   Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).

- TECH.9.4.12.TL.1   Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

- TECH.9.4.12.TL.2   Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.   0x   Digital tools differ in features, capacities, and styles. Knowledge of different digital tools is helpful in selecting the best tool for a given task.

Transfer Goals and Career Ready Practices

Transfer Goals

Students will be able to independently use their learning to use a presentation program, enabling them to, in the long-run, create and OPERATE professional interactive documents effectively and efficiently.

Concepts

Essential Questions

- How can new features and software updates in EXCEL make creating working/functioning documents more efficient/effective?
- How can we make dynamic soft-copies and visually appeal hard-copies?
- How can we become better organized using EXCEL's features and applications?
- What role does DATA, formatting, and structure play in the professional setting/world?
- How are graphics utilized in EXCEL, compared to previously learned sections (Google Apps, --? SHEETS)

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
- Understanding the components of a computer allow for successful troubleshooting
- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
- Color schemes and digital presentation skills
- Desktopo Publishing techniques
- Organizational capabilities of MS EXCEL
- Dynamic Funtionality of MS Excel
- MATHEMATICAL powers and navigational skills within the program

Skills

Students will be able to:

Demontrate navigation and organizational techques on all top toolbars

Work with keyboard shortcuts

Create professional documents

Adhere to proper grammatical structure through Tech lessons

Assessment and Resources

School Formative Assessment Plan (Other Evidence)
Assessments:

- Battleship - Navigating a spreadsheet and workbook
- Shopping Spree - Formulas & Functions
- Vacation Trip - Budgeting with Formulas and Look-Ups
- Famous Money - Calculating Tax Brackets with Formulas
- Post-Formal Restaurant - Computing totals, sales tax, & gratuity via formulas
- Schedule Creation - Tables, Bordering, Fill Options, Graphics tie-in
- Column Chart Creation
- The Social Pie Chart

School Summative Assessment Plan
Comprehensive Final Assessment (no MidTerm, as this a semester-based course)

Primary Resources
No formal textbook has been adopted for this course. Instructor has several years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Supplementary Resources

Web-Based and Network Files Based. No formal textbook has been adopted for this course. Instructor has 13+ years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

- o Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
- o GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

- o All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

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❑   All assignments have been created in the student's native language.

❑   Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❑   Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

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Interdisciplinary Connections

MATH - Proportions as they relate to orientation and layouts within spreadsheet & charting lessons

ELA - Demand for proper grammatical structure and spelling in all lessons and units

SCIENCE -

SOCIAL STUDIES -

WORLD LANGUAGES -

VISUAL/PERFORMING ARTS -

APPLIED TECHNOLOGY -

BUSINESS EDUCATION - Technology tie-ins and connections to the business world / office settings

GLOBAL AWARENESS -

Learning Plan / Pacing Guide

Week 1:

Interface introduction

Toolbar orientation and keyboard shortcut intro

Computations with equals sign

Week 2:

Intro to formulas

Intro to functions

Budgeting assessments

Week 3:

Intro to, then mastering of, dynamic charting techniques

Advanced table options - bordering, fill, thickness of outlines

V-Look-Ups VS H-Look-Ups

Week 4:

Portfolio week

Final projects and challenging by-hand comprehensive tasks

Assessments:

- Battleship - Navigating a spreadsheet and workbook
- Shopping Spree - Formulas & Functions
- Vacation Trip - Budgeting with Formulas and Look-Ups
- Famous Money - Calculating Tax Brackets with Formulas
- Post-Formal Restaurant - Computing totals, sales tax, & gratuity via formulas
- Schedule Creation - Tables, Bordering, Fill Options, Graphics tie-in
- Column Chart Creation
- The Social Pie Chart

2019 Unit 4 - POWER POINT

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **weeks**
Status: **Published**

Standards

Standards

- CS.9-12.8.1.12.CS.2   Model interactions between application software, system software, and hardware.

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Transfer Goals and Career Ready Practices

Transfer Goals

  Students will be able to independently use their learning to use a calculations and charting program, enabling them to, in the long-run, create and OPERATE professional computing documents effectively and efficiently.

Concepts

Essential Questions

- What makes an effective presentation (visuals, audio, organization, dynamic integration)
- How can new features and software updates in POWERPOINT make creating working/functioning documents more efficient/effective?
- How can we make dynamic soft-copies and visually appeal hard-copies?
- How can we become better organized using PowerPoint's features and applications?
- What role does MEDIA, formatting, and structure play in the professional setting/world?
- How are graphics utilized in PowerPoint, compared to previously learned sections (Google Apps, --? SLIDES)

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
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- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

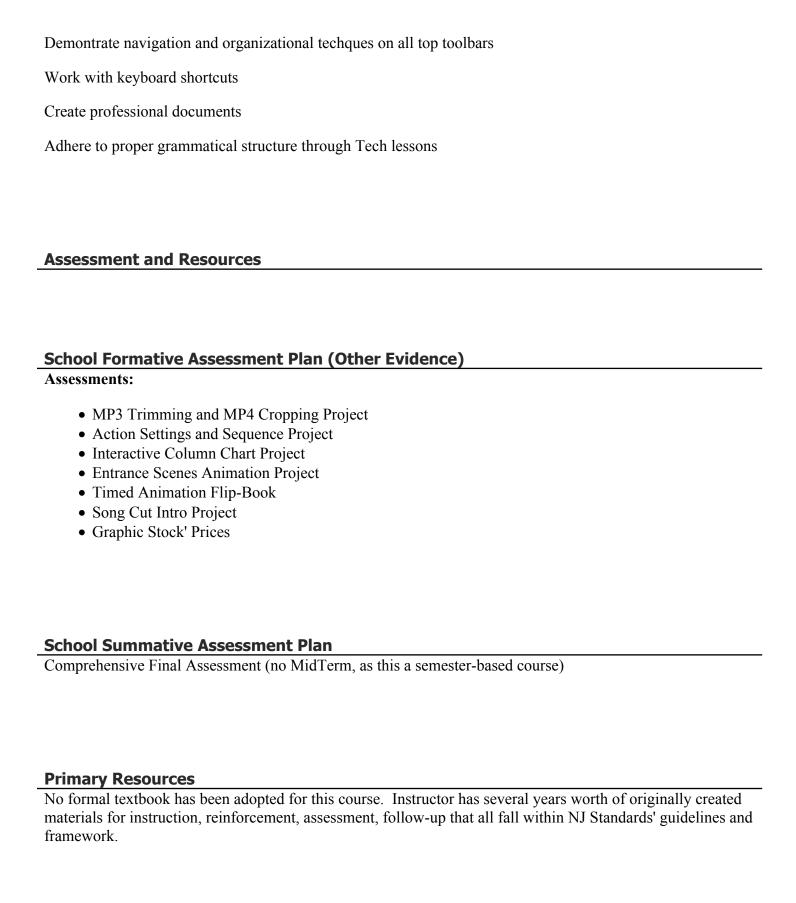## Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
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- Desktopo Publishing techniques
- Organizational capabilities of MS PPT
- Dynamic Funtionality of MS PPT

Skills

Students will be able to:

Demontrate navigation and organizational techques on all top toolbars

Work with keyboard shortcuts

Create professional documents

Adhere to proper grammatical structure through Tech lessons

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

Assessments:

- MP3 Trimming and MP4 Cropping Project
- Action Settings and Sequence Project
- Interactive Column Chart Project
- Entrance Scenes Animation Project
- Timed Animation Flip-Book
- Song Cut Intro Project
- Graphic Stock' Prices

School Summative Assessment Plan

Comprehensive Final Assessment (no MidTerm, as this a semester-based course)

Primary Resources

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ELA - Demand for proper grammatical structure and spelling in all lessons and units

SCIENCE -

SOCIAL STUDIES -

WORLD LANGUAGES -

VISUAL/PERFORMING ARTS -

APPLIED TECHNOLOGY -

BUSINESS EDUCATION - Technology tie-ins and connections to the business world / office settings

GLOBAL AWARENESS -

Learning Plan / Pacing Guide

Week 1:

Interface introduction

Toolbar orientation and keyboard shortcut intro

Master color scheme concepts

Week 2:

Learn how to totally control MP3 timings

Design MP4 cropped scenes within a slide

Discover auto-timings and their use for professional presentations

Week 3:

Explore Custom Anim. - Entrances, Motion Paths, Exits

Class jigsaws a major History/Science/English/Math topic and tells a story via auto timings

Charting techniques involving "pop" within a slide

Week 4:

Portfolio week

Final projects and challenging by-hand comprehensive tasks

Assessments:

- MP3 Trimming and MP4 Cropping Project
- Action Settings and Sequence Project
- Interactive Column Chart Project
- Entrance Scenes Animation Project
- Timed Animation Flip-Book
- Song Cut Intro Project
- Graphic Stock' Prices

2019 Unit 5 - INTRO TO WEB GRAPHICS

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **weeks**
Status: **Published**

Standards

Standards

- CS.9-12.8.1.12.CS.2   Model interactions between application software, system software, and hardware.

- CS.9-12.8.1.12.CS.3   Compare the functions of application software, system software, and hardware.   0x   Successful troubleshooting of complex problems involves multiple approaches including research, analysis, reflection, interaction with peers, and drawing on past experiences.   0x   A computing system involves interaction among the user, hardware, application software, and system software.

- TECH.9.4.12.CI.1   Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).

- TECH.9.4.12.TL.1   Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task (e.g., W.11-12.6.).

- TECH.9.4.12.TL.2   Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.   0x   Digital tools differ in features, capacities, and styles. Knowledge of different digital tools is helpful in selecting the best tool for a given task.

Transfer Goals and Career Ready Practices

Transfer Goals

   Students will be able to independently use their learning to use a graphics manipulation software program, enabling them to, in the long-run, create and originally modify professional interactiveimage files effectively and efficiently.

Concepts

Essential Questions

- What makes an image dynamic and professional in appearance?
- How can new nbew programs that are free, like GIMP, make creating working/functioning documents more efficient/effective?
- How can we make visually appeal virtual logos and images?
- How can we become better organized using a graphics manipulation program's features and applications?
- What role does MEDIA, formatting, and clarity play in the professional setting/world?
- How are graphics utilized in GIMP, compared to previously learned sections (Free web-browser-based graphics manipulators)

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
- Understanding the components of a computer allow for successful troubleshooting
- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
- Color schemes and digital presentation skills
- Desktopo Publishing techniques
- Organizational capabilities of the GIMP program
- Dynamic Funtionality of the GIMP program

Skills

Students will be able to:

Display creativity through manipulations of current images form the web

Display original creativity and digital skill-sets through from-scratch graphic creations

Master the keyboard shortcuts within the new and excitiing GIMP program software

Assessment and Resources

School Formative Assessment Plan (Other Evidence)
Assessments:

- Glow Text file creation
- School Pride - Team colors rendering
- Pencil Sketch rendering
- See-Through text creation
- Selective Coloring - Mimic a professional touch-up
- Album artwork digital creation
- Creating a 6-image tiled computer desktop wallper background
- Fire Text rendering for School Announcements
- Blending assignment - School Pride images
- Blending Final project - Incorporating history class themes

School Summative Assessment Plan
Comprehensive Final Assessment (no MidTerm, as this a semester-based course)

Primary Resources
No formal textbook has been adopted for this course. Instructor has several years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Supplementary Resources

Web-Based and Network Files Based. No formal textbook has been adopted for this course. Instructor has 13+ years worth of originally created materials for instruction, reinforcement, assessment, follow-up that all fall within NJ Standards' guidelines and framework.

Technology Integration and Differentiated Instruction

Technology Integration

● **Google Products**

  ○ Google Classroom - Used for daily interactions with the students covering a vast majority of different educational resources (Daily Notes, Exit Tickets, Classroom Polls, Quick Checks, Additional Resources/ Support, Homework, etc.)
  ○ GAFE (Google Apps For Education) - Using various programs connected with Google to collaborate within the district, co-teachers, grade level partner teacher, and with students to stay connected with the content that is covered within the topic. Used to collect data in real time and see results upon completion of the assignments to allow for 21st century learning.

● **One to One Student's laptop**

  ○ All students within the West Deptford School District are given a computer, allowing for 21st century learning to occur within every lesson/topic.

● **Additional Support Videos**

The videos below are just examples of videos that can be used to support each of the Lessons within this Topic.

Differentiated Instruction

Gifted Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, the Gifted Students are given choice on topic and subject matter allowing them to explore interests appropriate to their abilities, areas of interest and other courses.

English Language Learners (N.J.A.C.6A:15)

❏   Within each lesson, the English Language Learners are given choice of topic and resources so that their materials are within their ability to grasp the language.

❏   All assignments have been created in the student's native language.

❏   Work with ELL Teacher to allow for all assignments to be completed with extra time.

At-Risk Students (N.J.A.C.6A:8-4.3c)

❏   Within each lesson, the at-risk students are given choice of topic and resources so that their materials are within their ability level and high-interest.

Special Education Students (N.J.A.C.6A:8-3.1)

❏   Within each lesson, special education students are given choice of topic and resources so that their materials are within their ability level and high-interest.

❏   All content will be modeled with examples and all essays are built on a step-by-step basis so modifications for assignments in small chunks are met.

All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

MATH - Sizing and proportional adjustments as they relate to orientation and layouts within graphics manipulation and creation lessons

ELA - Demand for proper grammatical structure and spelling in all lessons and units

SCIENCE -

SOCIAL STUDIES -

WORLD LANGUAGES -

VISUAL/PERFORMING ARTS -

APPLIED TECHNOLOGY -

BUSINESS EDUCATION - Technology tie-ins and connections to the business world / office settings

GLOBAL AWARENESS -

Learning Plan / Pacing Guide

Week 1:

Interface introduction

Toolbar orientation and keyboard shortcut intro

Comparing free online graphics manipulators to our freeware software, GIMP

Week 2:

Discovering the Filters menu and trying new color add-ons

Comparing the toolbar icons to the menu plug-ins

Multiple walk-through assessments (half the assessments below are do-collectively type assignments)

Week 3:

Solo attempts at assessments (with written directions)

Adding graphics to our web pages

Cropping items to an exact pixel so we develop custom desktop backgrounds

Week 4:

Portfolio week

Final projects and challenging by-hand comprehensive tasks

Assessments:

- Glow Text file creation
- School Pride - Team colors rendering
- Pencil Sketch rendering
- See-Through text creation
- Selective Coloring - Mimic a professional touch-up

- Album artwork digital creation
- Creating a 6-image tiled computer desktop wallper background
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2019 Unit 6 - INTRO TO WEB PAGE DEVELOPMENT

Content Area: **Applied Tech**
Course(s):
Time Period: **Marking Period 1**
Length: **weeks**
Status: **Published**

Standards

Standards

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Transfer Goals and Career Ready Practices

Transfer Goals

   Students will be able to independently use their learning to use a coding platform (NotePad) and their web browsers (Chrome), enabling them to, in the long-run,create and OPERATE with toal authoring control professional interactive web-documents effectively and efficiently.

Concepts

Essential Questions

- What makes an effective website online? (visuals, audio, organization, dynamic integration)
- How can 2 programs we often overlook (NotePad and Chrome) enables to create from scratch working/functioning efficient/effective intranet sites?
- How can we make dynamic soft-copies and visually appeal hard-copies?
- How can we become better organized using Windows operating system's features and applications?
- What role does MEDIA, formatting, and structure play in the professional setting/world?

Understandings

- Computers are an essential part of society and necessary to function effectively in the real world
- Computers operations serve to input/output data, processes, and store information
- Understanding the components of a computer allow for successful troubleshooting
- Identify Desktop Publishing platforms
- Bookmark and take advantage of free web resources that enhance digital creativity

Critical Knowledge and Skills

Knowledge

Students will know:

- Digital versions VS literal hard-copy production
- Virtual organizational skills
- Technology vocabulary
- Color schemes and digital presentation skills
- Desktopo Publishing techniques
- Organizational capabilities of HTML coding
- Dynamic Funtionality of HTML coding

Skills

Students will be able to:

Create full authoring ownership of an intranet web page

Organize files and display the importance of strict organization

Incorporate critical networking skills from prior curriculum units

Create professional intranet web documents for other courses/content areas

Assessment and Resources

School Formative Assessment Plan (Other Evidence)

- Networking HTML into GIMP portfolios
- HTML code template quiz
- HTML code mistakes-finder quiz
- Embedding freeware shock files into HTML codes
- Remodeling a from-scratch HTML web page to mimic the MS Word web page from earlier in the semester
- Web Page Project #1 - Mastering basic coding strategies and insertion concepts
- Applying custom wallpaper backgrounds from GIMP creations
- Recipe/Cookbook web page - redesigning the MS Word project from earlier in the semester
- Scrolling Lyrics project - Mastering marquee timings and audio insertion

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All other IEP modifications will be honored (ie. hard copies of notes, directions restated, etc.)

Interdisciplinary Connections

MATH - Exact calculations as they relate to proper functioning and executing within web-doc creation lessons

ELA - Demand for proper grammatical structure and spelling in all lessons and units

SCIENCE - Step by Step processes mimic scientific method and planning structuring

SOCIAL STUDIES -

WORLD LANGUAGES -

VISUAL/PERFORMING ARTS -

APPLIED TECHNOLOGY -

BUSINESS EDUCATION - Technology tie-ins and connections to the business world / office settings

GLOBAL AWARENESS -

Learning Plan / Pacing Guide

Week 1:

Teach basics of networking by hand

Coding strategies and rationales

Stressing importance of exact spelling and size placements

Week 2:

Image manipulation by hand (code adjustments)

Teach adjustment techniques through incorporating skills learned in PowerPoints proportions lessons

Introduce sound and video insertion options

Week 3:

Assess skills via broken codes - Students will identify mistakes and fix them to achieve "working" pages

Search the web for freeware codes that can be shared and manipulated for personal pages

Teach tables and forms via challenging techniques

Week 4:

Portfolio week

Final projects and challenging by-hand comprehensive tasks

Assessments:

- Networking HTML into GIMP portfolios
- HTML code template quiz
- HTML code mistakes-finder quiz

- Embedding freeware shock files into HTML codes
- Remodeling a from-scratch HTML web page to mimic the MS Word web page from earlier in the semester
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