Technology Integration 2: 7th Grade

This course endeavors to develop technological literacy to empower students to acquire necessary technology based knowledge and skills. While along the way, developing critical thinking, problem solving, and career-focused soft skills through project-based learning, promoting innovation, creativity, and collaboration.

Course Information:

Frequency & Duration: Averaging 42 minutes; 5 days per week; approx. 7 weeks

Text: none

Content: Intro/Virtual Classroom/ Keyboarding Skills/Digital Presentation Software

Duration: 1 week

Big Project:	Illustrated Introduction PowerPoint
Skills:	- Understand the expectations and scope of the technology integration course - Utilize social media based virtual classroom structure - Virtually submit assignments/manage deadlines - Basic computer and cloud-based file management - Create, format, and edit in Microsoft Office PowerPoint presentation, Word doc
Instructional/Engagement Activities:	- Daily Activators (Word document students must edit and save over the course of each week, typing and answering daily questions) - Typing Tuesday – keyboarding skills practice (continues weekly for duration of class.

	• TI: Illustrated Intro PPT(presentation with 4 questions/slides to re-introduce students and their interest in technology)
Assessment:	• Daily activators typed accurately and answered, then submitted digitally at each week's end • TI: Illustrated Intro PPT (12 pictures), typed answers to all questions completed and submitted virtually
Resources:	Edmodo.com Microsoft Word, PowerPoint Daily Activators Questions, Promethean Flipchart Daily Activators, Word document TI: Illustrated Intro, PPT presentation
Standards:	15.4.8.A **Analyze the influence of emerging technologies on daily life.** 15.4.8.B **Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.** 15.4.8.K **Create a multimedia project using student-created digital media.** CC.3.6.6-8.C **Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.** CC.3.6.6-8.E **Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.**

Comments:

Content: Research/Data Analysis   **Duration:** 2 weeks

Big Project:	Multimedia Presentation (Sway)
Skills:	- Understand the process of internet search - Select keywords to conduct internet search for specific information - Execute efficient & accurate internet searches - Analyze and interpret results of an internet search - Understand URLs and parts thereof to predict site contents and compare sources. - Consider the personal impact of a technology - Compile online research, collect data to create a multimedia presentation
Instructional/Engagement Activities:	- Google Search Lesson Plans – Identifying keywords. - Internet search assignment: selecting keywords - Internet search assignment: (seasonal) Gobble Gobble Web quest, Black History Month Scavenger Hunt, etc. - Google Search Lesson Plans – Understanding search results - Interpreting search results activity (understanding URLs/Identifying sources) - Research and create "My Favorite Technology" multimedia presentation (Sway)
Assessment:	- Complete and accurate researched answers to all internet search assignment questions. - Multimedia presentation (Sway)
Resources:	Google Search Education Lesson Plans – from Google Worksheet(s): keywords assignment (Word), Gobble Gobble Webquest (pdf), BlackHistoryMonthInternetScavangerHunt_Qs (Word), Internet search Black History Month Qs (Word) Video: "The Internet: How Search Works" (YouTube – code.org's channel) Fav Tech research notes (Word) Program(s): Microsoft Sway, Office 365

Standards:

Standard - 15.4.8.A

Analyze the influence of emerging technologies on daily life.

Standard - 15.4.8.B

Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.

Standard - 15.4.8.D

Create projects using emerging input technologies.

Standard - 15.4.8.G

Create an advanced digital project using appropriate software/application for an authentic task.

Standard - 15.4.8.K

Create a multimedia project using student-created digital media.

Standard - 15.4.8.M

Explore and describe how emerging technologies are used across different career paths.

Comments:

Content: Coding   **Duration:** 2 weeks

Big Project:	Code.org (course 3)
Skills:	• Define: coding, algorithm • Write block-based code (JavaScript) utilizing loops, functions, and conditionals
Instructional/Engagement Activities:	• Code.org Course 3
Assessment:	• Completed lessons in course 3 of code.org
Resources:	Website: www.code.org Extras: Blockly games (https://blockly-games.appspot.com), Made with code by Google (https://www.madewithcode.com), Scratch (https://scratch.mit.edu/)
Standards:	15.4.8.A **Analyze the influence of emerging technologies on daily life.** 15.4.8.G **Create an advanced digital project using appropriate software/application for an authentic task.** 15.4.8.H **Explain the differences between a scripting language and a coding language.** 15.4.8.I **Solve a problem with an algorithm.** 15.4.8.J **Explain the basic differences between encoding and decoding.** 15.4.8.M **Explore and describe how emerging technologies are used across different career paths.**

Comments:

Content: Video Game Design/Systems   **Duration:** 2 weeks

Big Project:	Student re-designed video game
Skills:	• Play and review video games • Understand the aspects of video game design • Re-design previously created video games based on feedback from peers • Utilize the iterative design process • Define a system • Fill and sign a pdf file
Instructional/Engagement Activities:	• Play and review vintage video games • Play through Gamestar Mechanic Quest (5 episodes) • Identify the 5 elements of video game design in student created game. • Play and review/comment on peer created games. • Use Gamestar Mechanic workshop to re-design and publish student created game.
Assessment:	• Vintage educational/arcade/console video game reviews • Progress in Gamestar Mechanic Quest (5 episodes complete, @ least 50% overall)/ Designed video game (Rubric: 5 elements of video game design) • At least 3 reviews of peer created games in "Game Alley" of gamestarmechanic.com • Video Game Design worksheet
Resources:	Website(s): https://classicreload.com/ www.arcadedivision.com http://emulator.online/ (vintage educational video games: Odell Lake, Where in the World is Carmen Sandiego?, Oregon Trail, Number Munchers, vintage arcade games: Donkey Kong, Space Invaders, Ms. Pacman, vintage console games: Super Mario Bros. 3, Sonic the Hedgehog, Tetris) Website: www.gamestarmechanic.com Video Game Design Worksheet (.pdf file)

Standards:

15.4.8.B
Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.
15.4.8.D
Create projects using emerging input technologies.
15.4.8.G
Create an advanced digital project using appropriate software/application for an authentic task.
15.4.8.K
Create a multimedia project using student-created digital media.
15.4.8.M
Explore and describe how emerging technologies are used across different career paths.
CC.3.5.6-8.D
Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6–8 texts and topics.

Comments:

Content: Digital Citizenship   **Duration:** < 1 week

Big Project:	Digital Citizenship Scenarios
Skills:	• Explore digital citizenship in the areas of: Strategic Searching, Cyberbullying, A Creator's Rights, & Safe Online Talk • Find facts and gather data for conscientious decisions • Synthesize information and evaluate options • Assess situations in order to make informed judgments • Reflect on decisions and determine alternative choices • Build interpersonal empathy by role-playing and taking the perspective of others • Develop skill-based competencies through game-based learning • Apply learnings to real-world situations
Instructional/Engagement Activities:	Digital Citizenship Scenarios on digitalcompass.org: Citation Infestation (INFORMATION LITERACY) Hack-a-wrong (CREATIVE CREDIT & COPYRIGHT) Digital Heartbreak (CYBERBULLYING) Break It Down (INTERNET SAFETY)
Assessment:	• Achievement of badges for multiple results in each digital citizenship scenario.
Resources:	Website: www.digitalcompass.org
Standards:	Standard - 15.4.8.A **Analyze the influence of emerging technologies on daily life.** Standard - 15.4.8.B **Interpret and apply appropriate social, legal, ethical, and safe behaviors of digital citizenship.**

Comments: Inclusion and/or duration of this unit dependent upon available time.