HILLSBOROUGH Board of Education

HILLSBOROUGH TOWNSHIP PUBLIC SCHOOLS HILLSBOROUGH, NJ 08844

X NEW _ REVISED CURRICULUM

DATE: August 2022

SUPERVISOR:	CURRICULUM REVISION TEAM:
Joel Handler	James Smart
	Nicole Calafiore
Why was this curriculum revision c	completed? This curriculum is a new course
How is this related to the district pl	an for curriculum development?
X As scheduled on the five-year	curriculum revision cycle
Other	
Were the financial resources budge	ted for this revision?
Yes	
X No (please explain): Utilizin	ng existing staffing for this course.
Other comments: N/A	
Approval Dates	
Assistant Superintendent: Kim Feltre, Ed.D.	Folhe Date: 8/ 11/22
Board of Education Action	
Education Committee Chairperson:	Bendin Approval Date: 8/10/2022
Board of Education Approval Date:	APPROVED AUG 22 '

HILLSBOROUGH TOWNSHIP PUBLIC SCHOOLS

Office of Curriculum and Instruction CURRICULUM MAP

COURSE TITLE	Technology, Society, and Careers						
GRADE BAND		PreK-4		5-6	7-8	Х	9-12
DEPARTMENT	Technol	ogy					
LAST REVISION DATE							
BOE APPROVAL DATE							

COURSE OVERVIEW

In this semester-long course, students will engage in a hands-on study of technology while working in the High School's Tech Hub. Students will 1) learn core concepts of technology, computing systems and assisting in troubleshooting technology problems, 2) research and analyze issues at the intersection of technology, society and digital citizenship, and 3) explore technology career paths while developing critical thinking and problem solving skills.

Students interested in technology at a fundamental level and students interested in technology-related careers are encouraged to enroll in this course.

This 2.5 credit semester course helps fulfill the state graduation requirements for "at least 5 credits in Career Readiness, Life Literacies, & Key Skills."

The curriculum is aligned to the Computer Science & Design Thinking New Jersey Student Learning Standards.

The interdisciplinary and experiential nature of the rigorous academic concepts coupled with real-world hands-on lessons allows connections to many NJ standard areas. As such, where applicable, integrations to the other New Jersey Student Learning Standards have been noted in the areas of Comprehensive Health and Physical Education, English Language Arts, Mathematics, Science, Social Studies, World Languages, and Visual Performing Arts.

UNIT OF STUDY	Computing Systems
PACING	Approx. 14 Days

ESSENTIAL QUESTIONS

- What is a Computer System?
- How have technological changes changed the way we live our daily lives?
- How can we prepare ourselves (skills needed) to use the technology of the future?
- As technology continues to change and improve, how can we know what skills to learn?

ENDURING UNDERSTANDINGS

- A computing system will vary between institutions but consist of computers, as well as supporting software and shared storage.
- Technology affects each individual differently, providing varied advancements.
- Focusing on skills for technology today will help prepare for the technology of the future.
- There are a variety of skill sets that are needed in order to be successful in the technology industry.

LEARNING TARGETS

- Students will understand what a computer system is and how it functions.
- Students will gain a greater understanding of how computers impact our daily lives.
- Students will be able to have a working knowledge of computer systems in their future lives.
- Students will gain a greater understanding of how different computer systems interact within the school setting.

ASSESSMENTS

Pre-Assessment(s)	 Such as predictions, student discussions, open ended questioning, and concept mapping
Formative	 Such as in-class discussions, classwork assignments, and open ended question responses
Summative	Such as quiz or test assessments and projects
Benchmark / Common	LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

• 8.1.12.CS.1: Describe ways in which integrated systems hide underlying implementation details to simplify user experiences.

- 8.1.12.CS.2: Model interactions between application software, system software, and hardware.
- 8.1.12.CS.3: Compare the functions of application software, system software, and hardware.
- 8.1.12.IC.1: Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.
- 8.1.12.NI.2: Evaluate security measures to address various common security threats.
- 8.1.12.NI.3: Explain how the needs of users and the sensitivity of data determine the level of security implemented.

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

• 2.3.12.PS.8: Develop strategies to communicate effectively, safely, and with empathy when using digital devices in a variety of situations (e.g., cyberbullying, sexting).

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.

- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.
- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

None.

Visual & Performing Arts

None.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS

Must include the standard # & verbiage

9.1-Personal Financial Literacy

• 9.1.12.Fl.1: Identify ways to protect yourself from identity theft.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).
- 9.4.12.IML.1: Compare search browsers and recognize features that allow for filtering of information.
- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility of the source, and relevance of information, in media, data, or other resources (e.g., NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources).
- 9.4.12.IML.3: Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions (e.g., S-ID.B.6a., 8.1.12.DA.5, 7.1.IH.IPRET.8).

• 9.4.12.IML.5: Evaluate, synthesize, and apply information on climate change from various sources appropriately (e.g., 2.1.12.CHSS.6, S.IC.B.4, S.IC.B.6, 8.1.12.DA.1, 6.1.12.GeoHE.14.a, 7.1.AL.PRSNT.2).

CAREERS ASSOCIATED WITH THIS UNIT

- IT Consultant
- Software Developer/Programmer
- Tech Support Helpdesk Call Center Operator

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4.35</u>

• Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

• Accommodations for all subject areas may be viewed here.

RESOURCES – <u>Cited</u> print and electronic sources

Educator Resources

• Teachers will use in-house resources.

Student Resources

None.

Parent Resources

• None.

UNIT OF STUDY	Technology Literacy	
PACING	Approx. 10 Days	

ESSENTIAL QUESTIONS

- What is technology literacy?
- How is being technologically literate helpful to today's students as they move forward in their lives?
- Why is being technologically literate important in today's society?

ENDURING UNDERSTANDINGS

- Technology literacy allows one to function in a fully digital environment.
- Technology literacy will build on many skills that are beneficial for future success.
- In a world that is becoming reliant on technology, it is more essential than ever to be able to work in an environment centered around technology.

LEARNING TARGETS

- Students will define and discuss vocabulary related to the technology literacy unit.
- Students will research different technologies available in our school district.
- Students will be able to perform basic tasks using technology such as Google Suite.
- Students will be able to perform tasks using more advanced technology such as coding and 3D printing.

ASSESSMENTS	
Pre-Assessment(s)	 Such as predictions, student discussions, open ended questioning, and concept mapping
Formative	 Such as in-class discussions, classwork assignments, and open ended question responses
Summative	Such as quiz or test assessments and projects
Benchmark / Common	LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

- 8.1.12.CS.2: Model interactions between application software, system software, and hardware.
- 8.1.12.CS.3: Compare the functions of application software, system software, and hardware.
- 8.1.12.IC.1: Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.

- 8.2.12.ED.1: Use research to design and create a product or system that addresses a problem and make modifications based on input from potential consumers.
- 8.2.12.ED.4: Design a product or system that addresses a global problem and document decisions made based on research, constraints, trade-offs, and aesthetic and ethical considerations and share this information with an appropriate audience.
- 8.2.12.ITH.1: Analyze a product to determine the impact that economic, political, social, and/or cultural factors have had on its design, including its design constraints.

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

• 2.3.12.PS.9: Evaluate strategies to use social media safely, legally, and respectfully.

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.
- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

None.

Visual & Performing Arts

None.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility
 of the source, and relevance of information, in media, data, or other resources (e.g.,
 NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources.)
- 9.4.12.IML.4: Assess and critique the appropriateness and impact of existing data visualizations for an intended audience (e.g., S-ID.B.6b, HS-LS2-4).
- 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.).
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem (e.g., 7.1.AL.IPERS.6).

CAREERS ASSOCIATED WITH THIS UNIT

- Tech Support Helpdesk Call Center Operator
- Digital Literacy Specialist

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4:35</u>

• Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

 Accommodations for all subject areas may be viewed <u>here</u>.
RESOURCES – <u>Cited</u> print and electronic sources
Educator Resources
Teachers will use in-house resources.
Student Resources
None.
Parent Resources
None.

UNIT OF STUDY	Digital Citizenship	
PACING	Approx. 10 Days	

ESSENTIAL QUESTIONS

- What is Digital Citizenship?
- Why is it important to be a "Good Digital Citizen" while online?
- How can someone's online behavior impact their current and future life?

ENDURING UNDERSTANDINGS

- Digital Citizenship refers to the ability to engage positively in a digital world.
- Digital Citizenship provides many practical skills for one to succeed in the technology industry.
- There are countless ways someone's online behavior can affect their future with both positive and negative outcomes.

LEARNING TARGETS

- Students will be able to define and discuss vocabulary related to the Digital Citizenship unit.
- Students will be able to identify some of the key elements to being a "Good Digital Citizen."
- Students will gain a greater understanding of how their habits and behaviors online can impact their social and emotional lives of today and tomorrow.
- Students will gain a greater understanding of some of the legal ramifications of their online behavior.
- Students will promote positive digital interactions among peers.

Pre-Assessment(s) Such as predictions, student discussions, open ended questioning, and concept mapping Formative Such as in-class discussions, classwork assignments, and open ended question responses Summative Such as quiz or test assessments and projects LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

• 8.1.12.DA.5: Create data visualizations from large data sets to summarize, communicate, and support different interpretations of real-world phenomena.

• 8.2.12.ETW.2: Synthesize and analyze data collected to monitor the effects of a technological product or system on the environment.

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

- 2.3.12.PS.8: Develop strategies to communicate effectively, safely, and with empathy when using digital devices in a variety of situations (e.g., cyberbullying, sexting)
- 2.3.12.PS.9: Evaluate strategies to use social media safely, legally, and respectfully.
- 2.3.12.PS.10: Analyze the short- and long-term consequences of sharing sexually explicit images (sexting) or messages with individuals or posting online.

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.
- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

• 6.2.12.EconGE.6.c: Relate the rise of the Internet and social media to the global economy.

Visual & Performing Arts

None.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS

Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

- 9.4.12.DC.1: Explain the beneficial and harmful effects that intellectual property laws can have on the creation and sharing of content (e.g., 6.1.12.CivicsPR.16.a).
- 9.4.12.DC.3: Evaluate the social and economic implications of privacy in the context of safety, law, or ethics (e.g., 6.3.12.HistoryCA.1).
- 9.4.12.DC.4: Explain the privacy concerns related to the collection of data (e.g., cookies) and generation of data through automated processes that may not be evident to users (e.g., 8.1.12.NI.3).
- 9.4.12.DC.6: Select information to post online that positively impacts personal image and future college and career opportunities.
- 9.4.12.DC.7: Evaluate the influence of digital communities on the nature, content and responsibilities of careers, and other aspects of society (e.g., 6.1.12.CivicsPD.16.a).

CAREERS ASSOCIATED WITH THIS UNIT

Education Technology Specialist

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4.35</u>

• Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

Accommodations for all subject areas may be viewed here.
RESOURCES - Cited print and electronic sources
Educator Resources
Teachers will use in-house resources.

Student Resources

None.

Parent Resources
None.

UNIT OF STUDY	Hardware Repairs
PACING	Approx. 10 Days

ESSENTIAL QUESTIONS

- How can repairing Chromebooks in-house be more effective?
- What skill sets are being utilized during repairs?

ENDURING UNDERSTANDINGS

- There are a number of practical and valuable reasons to fix Chromebooks in-house.
- As a computer technician, many skill sets are utilized to work efficiently and effectively.

LEARNING TARGETS

ASSESSMENTS

- Students will define, discuss, and demonstrate techniques and vocabulary related to this unit.
- Students will be able to identify and define the major systems and subsystems of a Chromebook.
- Students will be able to diagnose Chromebook issues.
- Students will be able to service basic Chromebook repairs.
- Students will be able to replace broken keyboards and screens.

Pre-Assessment(s) • Such as predictions, student discussions, open ended questioning, and concept mapping • Such as in-class discussions, classwork assignments, and

Formative	open ended question responses

• Such as quiz or test assessments and projects

Benchmark / Common • LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

- 8.2.12.ETW.2: Synthesize and analyze data collected to monitor the effects of a technological product or system on the environment.
- 8.2.12.ED.1: Use research to design and create a product or system that addresses a problem and make modifications based on input from potential consumers.
- 8.2.12.ED.5: Evaluate the effectiveness of a product or system based on factors that
 are related to its requirements, specifications, and constraints (e.g., safety, reliability,
 economic considerations, quality control, environmental concerns, manufacturability,
 maintenance and repair, ergonomics).

• 8.2.12.ED.6: Analyze the effects of changing resources when designing a specific product or system (e.g., materials, energy, tools, capital, labor).

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

None.

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.
- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.
- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

• 6.3.12.EconGE.1: Participate in a simulated meeting (e.g., President's Council, World Bank, International Monetary Fund (IMF), research evidence from multiple sources about an economic problem (e.g., inflation, unemployment, deficit), and develop a plan of action.

Visual & Performing Arts

None.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

- 9.4.12.IML.2: Evaluate digital sources for timeliness, accuracy, perspective, credibility
 of the source, and relevance of information, in media, data, or other resources (e.g.,
 NJSLSA.W8, Social Studies Practice: Gathering and Evaluating Sources).
- 9.4.12.IML.3: Analyze data using tools and models to make valid and reliable claims, or to determine optimal design solutions (e.g., S-ID.B.6a., 8.1.12.DA.5, 7.1.IH.IPRET.8).
- 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.).
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem (e.g., 7.1.AL.IPERS.6).

CAREERS ASSOCIATED WITH THIS UNIT

- Computer Hardware Repair Technician
- Computer Support Specialist

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4.35</u>

• Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

Accommodations for all subject areas may be viewed <u>here</u>.

RESOURCES – <u>Cited</u> print and electronic sources		
Educator Resources		
Teachers will use in-house resources.		
Student Resources		
None.		
Parent Resources		
None.		

UNIT OF STUDY	Client Services
PACING	Approx. 18 Days

ESSENTIAL QUESTIONS

- What are characteristics of quality customer service to clients?
- How can we better service the school community?

ENDURING UNDERSTANDINGS

- There are numerous characteristics that contribute to effective and efficient customer service.
- Technology serves the school community on a large scale and provides the best service for each member.

LEARNING TARGETS

- Students will define, discuss, and demonstrate techniques and vocabulary related to the client services industry.
- Students will understand the industry characteristics of a customer service representative.
- Students will understand the duties and expectations of a customer service representative, the role diversity plays in the life of a customer service representative, and best practices for challenging customer situations.
- Students will be able to service technology issues for students and staff.
- Students will assess current practices and analyze current workflow patterns for better solutions.

ASSESSMENTS	
Pre-Assessment(s)	 Such as predictions, student discussions, open ended questioning, and concept mapping
Formative	 Such as in-class discussions, classwork assignments, and open ended question responses
Summative	Such as quiz or test assessments and projects
Benchmark / Common	LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

• 8.1.12.IC.1: Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.

- 8.1.12.CS.4: Develop guidelines that convey systematic troubleshooting strategies that others can use to identify and fix errors.
- 8.2.12.ED.5: Evaluate the effectiveness of a product or system based on factors that
 are related to its requirements, specifications, and constraints (e.g., safety, reliability,
 economic considerations, quality control, environmental concerns, manufacturability,
 maintenance and repair, ergonomics).

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

• 2.3.12.PS.8: Develop strategies to communicate effectively, safely, and with empathy when using digital devices in a variety of situations (e.g., cyberbullying, sexting).

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.

- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.
- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

• 6.3.12.EconGE.1: Participate in a simulated meeting (e.g., President's Council, World Bank, International Monetary Fund (IMF), research evidence from multiple sources about an economic problem (e.g., inflation, unemployment, deficit), and develop a plan of action.

Visual & Performing Arts

None.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.2: Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

• 9.4.12.GCA.1: Collaborate with individuals to analyze a variety of potential solutions to climate change effects and determine why some solutions (e.g., political. economic,

cultural) may work better than others (e.g., SL.11-12.1., HS-ETS1-1, HS-ETS1-2, HS-ETS1-4, 6.3.12.GeoGl.1, 7.1.IH.IPERS.6, 7.1.IL.IPERS.7, 8.2.12.ETW.3).

- 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.).
- 9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.
- 9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem (e.g., 7.1.AL.IPERS.6).

CAREERS ASSOCIATED WITH THIS UNIT

- Customer Service Representative
- Tech Support Representative
- Concierge
- Member Services Specialist

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4.35</u>

 Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

• Accommodations for all subject areas may be viewed <u>here</u>.

RESOURCES – <u>Cited</u> print and electronic sources

Educator Resources

• Teachers will use in-house resources.

Student Resources

None.

Parent Resources

None.

UNIT OF STUDY	Creativity and Innovation in Technology
PACING	Approx. 18 Days

ESSENTIAL QUESTIONS

- How can technology solve real-life problems?
- How does technology innovation affect society?
- How does technology affect both product-based and service-based industries?

ENDURING UNDERSTANDINGS

- Technology continues to advance and provide solutions to societal problems.
- There are countless factors to consider to determine how technology affects society.
- Technology is advancing and accelerating the process for product and service based businesses.

LEARNING TARGETS

- Students will define, discuss, and demonstrate techniques and vocabulary related to this unit.
- Students will understand the impact of technology has had on society over time.
- Students will use technology to create a solution to a problem in their daily life.
- Students will compare technology use for product based and service based businesses.

ASSESSMENTS	
Pre-Assessment(s)	 Such as predictions, student discussions, open ended questioning, and concept mapping
Formative	 Such as in-class discussions, classwork assignments, and open ended question responses
Summative	Such as quiz or test assessments and projects
Benchmark / Common	LinkIt Assessment

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

- 8.2.12.ED.1: Use research to design and create a product or system that addresses a problem and make modifications based on input from potential consumers.
- 8.2.12.ED.4: Design a product or system that addresses a global problem and document decisions made based on research, constraints, trade-offs, and aesthetic and ethical considerations and share this information with an appropriate audience.

- 8.2.12.ED.6: Analyze the effects of changing resources when designing a specific product or system (e.g., materials, energy, tools, capital, labor).
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product.
- 8.2.12.NT.2: Redesign an existing product to improve form or function.

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

- 2.3.12.PS.8: Develop strategies to communicate effectively, safely, and with empathy when using digital devices in a variety of situations (e.g., cyberbullying, sexting).
- 2.3.12.PS.9: Evaluate strategies to use social media safely, legally, and respectfully.

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.
- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.

- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

• 6.3.12.EconGE.1: Participate in a simulated meeting (e.g., President's Council, World Bank, International Monetary Fund (IMF), research evidence from multiple sources about an economic problem (e.g., inflation, unemployment, deficit), and develop a plan of action.

Visual & Performing Arts

- 1.5.12prof.Cr1a: Use multiple approaches to begin creative endeavors.
- 1.5.12adv.Cr1a: Visualize and generate art and design that can affect social change.
- 1.5.12adv.Cr1b: Choose from a range of materials and methods of traditional and contemporary artistic practices, following or breaking established conventions, to plan the making of multiple works of art and design based on a theme, idea or concept.
- 1.5.12adv.Cr2a: Experiment, plan and make multiple works of art and design that explore a personally meaningful theme, idea, or concept.
- 1.5.12adv.Cr2c: Demonstrate in works of art or design how visual and material culture defines, shapes, enhances, inhibits, and/or empowers people's lives.
- 1.5.12adv.Cr3a: Reflect on, re-engage, revise and refine works of art or design considering relevant traditional and contemporary criteria as well as personal artistic vision.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.
- 9.2.12.CAP.7: Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in areas of career interest.

9.4-Life Literacies & Key Skills

- 9.4.12.CI.1: Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice (e.g., 1.1.12acc.C1b, 2.2.12.PF.3).
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving (e.g., 1.3E.12profCR3.a).

CAREERS ASSOCIATED WITH THIS UNIT

- Application/App Developer
- Web Page Developer
- Software Engineer

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4:35</u>

 Students will research diverse (people of color, LGBT+, and those with disabilities) backgrounds of individuals and how these individuals are currently represented in the Technology industry. The students will share their findings with the class.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals
- Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

• Accommodations for all subject areas may be viewed <u>here</u>.

RESOURCES – <u>Cited</u> print and electronic sources

Educator Resources

Teachers will use in-house resources.

Student Resources

None.

Parent Resources

None.

UNIT OF STUDY	Career Awareness and Planning
PACING	Approx. 10 Days

ESSENTIAL QUESTIONS

- What is the difference between a career and an occupation?
- How can a career impact your lifestyle?
- What factors should be researched when considering a higher education institution or program?
- Why is having a professional portfolio imperative when applying for higher education and for future career opportunities?
- What career opportunities exist in various fields and how does technology play a role in that area?

ENDURING UNDERSTANDINGS

- There are several factors that help establish the definition of a career.
- The process of choosing a career is unique to each person as they see fit to their long-term goals.
- There are several factors to consider when choosing a higher education institution or program that fits the individual's lifestyle.
- A portfolio has a number of benefits to help students.
- Technology plays a vital role in the success of many industries.

LEARNING TARGETS

- The students will assess their interests, aptitudes, abilities, and personality traits to determine a good career selection.
- The students will research and evaluate careers for job duties and responsibilities, career levels, skill levels, employment outlook, earning levels, and other factors.
- The students will summarize education and training options and how to achieve education goals.
- The students will demonstrate how to use sources of career information.
- The students will create and assemble a digital portfolio showcasing their projects.

ASSESSMENTS		
Pre-Assessment(s)	 Such as predictions, student discussions, open ended questioning, and concept mapping 	
Formative	 Such as in-class discussions, classwork assignments, and open ended question responses 	
Summative	Such as quiz or test assessments and projects	
Benchmark / Common	LinkIt Assessment	

NEW JERSEY STUDENT LEARNING STANDARDS (NJSLS)

Must include the standard # & verbiage

- 8.2.12.ED.1: Use research to design and create a product or system that addresses a problem and make modifications based on input from potential consumers.
- 8.2.12.ED.6: Analyze the effects of changing resources when designing a specific product or system (e.g., materials, energy, tools, capital, labor).
- 8.2.12.NT.1: Explain how different groups can contribute to the overall design of a product.

INTERDISCIPLINARY CONNECTIONS

Must include the standard # & verbiage

Comprehensive Health & Physical Education

None.

English Language Arts

- NJSLSA.W4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- NJSLSA.W5: Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
- NJSLSA.W6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.
- NJSLSA.W8: Gather relevant information from multiple print and digital sources, assess
 the credibility and accuracy of each source, and integrate the information while
 avoiding plagiarism.
- NJSLSA.SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- NJSLSA.SL5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Mathematics

None.

Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- HS-PS4-2: Evaluate questions about the advantages of using a digital transmission and storage of information.

- HS-PS4-5: Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy.
- HS-LS2-7: Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on climate change and other natural systems.

Social Studies

None.

Visual & Performing Arts

- 1.5.12prof.Cr1a: Use multiple approaches to begin creative endeavors.
- 1.5.12adv.Cr1a: Visualize and generate art and design that can affect social change.
- 1.5.12adv.Cr1b: Choose from a range of materials and methods of traditional and contemporary artistic practices, following or breaking established conventions, to plan the making of multiple works of art and design based on a theme, idea or concept.
- 1.5.12adv.Cr2a: Experiment, plan and make multiple works of art and design that explore a personally meaningful theme, idea, or concept.
- 1.5.12adv.Cr2c: Demonstrate in works of art or design how visual and material culture defines, shapes, enhances, inhibits, and/or empowers people's lives.
- 1.5.12adv.Cr3a: Reflect on, re-engage, revise and refine works of art or design considering relevant traditional and contemporary criteria as well as personal artistic vision.

World Languages

None.

CAREER READINESS, LIFE LITERACIES, & KEY SKILLS CONNECTIONS Must include the standard # & verbiage

9.1-Personal Financial Literacy

None.

9.2-Career Awareness, Exploration, Preparation, and Training

- 9.2.12.CAP.1: Analyze unemployment rates for workers with different levels of education and how the economic, social, and political conditions of a time period are affected by a recession.
- 9.2.12.CAP.2: Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
- 9.2.12.CAP.3: Investigate how continuing education contributes to one's career and personal growth.

- 9.2.12.CAP.4: Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment.
- 9.2.12.CAP.5: Assess and modify a personal plan to support current interests and postsecondary plans.
- 9.2.12.CAP.6: Identify transferable skills in career choices and design alternative career plans based on those skills.

9.4-Life Literacies & Key Skills

- 9.4.12.Cl.1: Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).
- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
- 9.4.12.Cl.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).

CAREERS ASSOCIATED WITH THIS UNIT

- Application/App Developer
- Web Page Developer
- Software Engineer
- Tech Support Representative
- Computer Hardware Repair Technician
- Computer Support Specialist
- IT Consultant
- Software Developer/Programmer

DIVERSITY, EQUITY, & INCLUSION CONNECTIONS

Required in grades K-12 per <u>N.J.S.A. 18A:35-4:36a</u> & the Amistad Law <u>N.J.S.A. 18A 52:16A-88</u> Required in grades 7-12 per <u>N.J.S.A. 18A:35-4:35</u>

None.

SOCIAL EMOTIONAL LEARNING CONNECTIONS

NJ SEL sub-competencies are listed that are addressed in this unit

Self-Awareness

- Recognize the impact of one's feelings and thoughts on one's own behavior
- Recognize one's personal traits, strengths, and limitations
- Recognize the importance of self confidence in handling daily tasks and challenges

Self-Management

- Understand and practice strategies for managing one's own emotions, thoughts, and behaviors
- Recognize the skills needed to establish and achieve personal and educational goals

 Identify and apply ways to persevere or overcome barriers through alternative methods to achieve one's goals

Social Awareness

- Demonstrate an awareness of the differences among individuals, groups, and others' cultural backgrounds
- Demonstrate an understanding of the need for mutual respect when viewpoints differ

Relationship Skills

- Establish and maintain healthy relationships
- Utilize positive communication and social skills to interact effectively with others
- Identify ways to resist inappropriate social pressure

Responsible Decision-Making

- Identify the consequences associated with one's actions in order to make constructive choices
- Evaluate personal, ethical, safety, and civic impact of decisions

MODIFICATIONS/ACCOMMODATIONS - ELL, Special Education, Gifted, At Risk of Failure, 504

• Accommodations for all subject areas may be viewed here.

RESOURCES – *Cited* print and electronic sources

Educator Resources

Teachers will use in-house resources.

Student Resources

• None.

Parent Resources

None.