# MOORESTOWN TOWNSHIP PUBLIC SCHOOLS MOORESTOWN, NEW JERSEY

Moorestown High School
Art & Technology: Visual & Media Arts

Multimedia Design 9th-12<sup>th</sup> Grades

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## **Contents**

Administration

Course Description and Fundamental Concepts

New Jersey Student Learning Standards

**Units** 

**Pacing Guide** 

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## **Course Description and Fundamental Concepts**

Multimedia Design B11-35

Grades: 9-12 2.5 Crs./Semester

Students in the course will build on their design skills through the design and development of multimedia projects. Design of web elements will emphasize the user experience and creativity using the elements and principles of design. Animation, Adobe tools, and traditional hand drawing methods will be combined to execute a variety of creative projects. Areas of study will include: understanding the user experience, preparing images for the web, file management, WYSIWYG web design software, Adobe Indesign for web design, basic editing in Adobe Photoshop and Adobe Illustrator, and the application of the elements and principles of design. Graphics, animation, and sound will be used as enhancement tools. Upon completion of this course, students will have valuable marketable skills.

#### **Fundamental Concepts**

#### **Unit 1: History of the Web**

- 1. The intended purpose of the World Wide Web
- 2. Development of the www & interactive language

#### **Unit 2: Basic Code**

- 1. HTML & CSS
- 2. Navigation
- 3. Design

#### **Unit 3: Design: Elements & Principles**

- 1. Well-designed web
- 2. Working with Color
- 3. Site map

#### **Unit 4: Creating Content**

- 1. Information based content
- 2. Entertainment
- 3. Interactive: Games
- 4. Preparing/saving files for the web publishing

## New Jersey Student Learning Standards (NJSLS)

#### Visual & Media Arts

Visual Arts Standard 1 Generating and conceptualizing ideas.

**Enduring Understanding:** Creativity and innovative thinking are essential life skills that can be developed. Artists and designers shape artistic investigations, following or breaking with traditions in pursuit of creative art-making goals.

**Essential Question(s):** What conditions, attitudes, and behaviors support creativity and innovative thinking? What factors prevent or encourage people to take creative risks? How does collaboration expand the creative process? How does knowing the contexts, histories, and traditions of art forms help us create works of art and design? Why do artists follow or break from established traditions? How do artists determine what resources and criteria are needed to formulate artistic investigations?

Practice: Explore

Standard #	Standard Description
1.5.12.Cr1a	1.5.12prof.Cr1a: Use multiple approaches to begin creative endeavors.
	1.5.12acc.Cr1a: Individually and collaboratively formulate new creative problems based on a student's existing artwork.
	1.5.12adv.Cr1a: Visualize and generate art and design that can affect social change.
1.5.12.Cr1b	1.5.12prof.Cr1b: Shape an artistic investigation of an aspect of present-day life using a contemporary practice of art and design.
	1.5.12acc.Cr1b: Choose from a range of materials and methods of traditional and contemporary artistic practices to plan works of art and design.
	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.

**Anchor Standard 2:** Organizing and developing ideas.

**Enduring Understanding:** Artists and designers experiment with forms, structures, materials, concepts, media, and art-making approaches. Artists and designers balance experimentation and safety, freedom and responsibility while developing and creating artworks. People create and interact with objects, places, and design that define, shape, enhance, and empower their lives.

**Essential Question(s):** How do artists work? How do artists and designers determine whether a particular direction in their work is effective? How do artists and designers learn from trial and error? How do artists and designers care for and maintain materials, tools, and equipment? Why is it important for safety and health to understand and follow correct procedures in handling materials, tools, and equipment? What responsibilities come with the freedom to create? How do objects, places, and design shape lives and communities? How do

artists and designers determine goals for designing or redesigning objects, places, or systems? How do artists and designers create works of art or design that effectively communicate?

**Practice:** Investigate

Standard #	Standard Description
1.5.12.Cr2a	1.5.12prof.Cr2a: Engage in making a work of art or design without having a preconceived plan.
	1.5.12acc.Cr2a: Through experimentation, practice and persistence, demonstrate acquisition of skills and knowledge in a chosen art form.
	1.5.12adv.Cr2a: Experiment, plan and make multiple works of art and design that explore a personally meaningful theme, idea, or concept.
1.5.12.Cr2b	1.5.12prof.Cr2b: Explain how traditional and non-traditional materials may impact human health and the environment, and demonstrate safe handling of materials, tools and equipment.
	1.5.12acc.Cr2b: Demonstrate awareness of ethical implications of making and distributing creative work.
	1.5.12adv.Cr2b: Demonstrate understanding of the importance of balancing freedom and responsibility in the use of images, materials, tools and equipment in the creation and circulation of creative work.
1.5.12.Cr2c	1.5.12prof.Cr2c: Collaboratively develop a proposal for an installation, artwork, or space design that transforms the perception and experience of a particular place.
	1.5.12acc.Cr2c: Redesign an object, system, place, or design in response to contemporary issues.
	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.

**Anchor Standard 3:** Refining and completing products.

**Enduring Understanding:** Artists and designers develop excellence through practice and constructive critique, reflecting on, revising, and refining work over time.

**Essential Question(s):** What role does persistence play in revising, refining, and developing work? How do artists grow and become accomplished in art forms? How does collaboratively reflecting on a work help us experience it more completely?

Practice: Reflect, Refine, Continue

Standard Description	Standard #	Standard Description
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1.5.12.Cr3a	1.5.12prof.Cr3a: Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on and plan revisions for works of art and design in progress.
	1.5.12acc.Cr3a: Engage in constructive critique with peers, then reflect on, re- engage, revise, and refine works of art and design in response to personal artistic vision.
	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.

**Anchor Standard 4:** Selecting, analyzing, and interpreting work.

**Enduring Understanding:** Artists and other presenters consider various techniques, methods, venues, and criteria when analyzing, selecting, and curating objects artifacts, and artworks for preservation and presentation.

**Essential Question(s):** How are artworks cared for and by whom? What criteria, methods, and processes are used to select work for preservation or presentation? Why do people value objects, artifacts, and artworks, and select them for presentation?

Practice: Analyze

Standard #	Standard Description
1.5.12.Pr4a	1.5.12prof.Pr4a: Analyze, select and curate artifacts and/or artworks for presentation and preservation.
	1.5.12acc.Pr4a: Analyze, select and critique personal artwork for a collection or portfolio presentation.
	1.5.12adv.Pr4a: Critique, justify and present choices in the process of analyzing, selecting, curating, and presenting artwork for a specific exhibit or event.

**Anchor Standard 5:** Developing and refining techniques and models or steps needed to create products. **Enduring Understanding:** Artists, curators and others consider a variety of factors and methods including evolving technologies when preparing and refining artwork for display and or when deciding if and how to preserve and protect it.

**Essential Questions:** What methods and processes are considered when preparing artwork for presentation or preservation? How does refining artwork affect its meaning to the viewer? What criteria are considered when selecting work for presentation, a portfolio, or a collection?

**Practice:** Select

Standard #	Standard Description
1.5.12.Pr5a	1.5.12prof.Pr5a: Analyze and evaluate the reasons and ways an exhibition is presented.
	1.5.12acc.Pr5a: Evaluate, select and apply methods or processes appropriate to display artwork in a specific place.
	1.5.12adv.Pr5a: Investigate, compare and contrast methods for preserving and protecting art.

Anchor Standard 6: Conveying meaning through art.

**Enduring Understanding:** Objects, artifacts, and artworks collected, preserved, or presented either by artists, museums, or other venues communicate meaning and a record of social, cultural, and political experiences resulting in the cultivating of appreciation and understanding.

**Essential Questions:** What is an art museum? How does the presenting and sharing of objects, artifacts, and artworks influence and shape ideas, beliefs, and experiences? How do objects, artifacts, and artworks collected, preserved, or presented, cultivate appreciation and understanding?

**Practice:** Share

Standard #	Standard Description
1.5.12.Pr6a	1.5.12prof.Pr6a: Analyze and describe the impact that an exhibition or collection has on personal awareness of social, cultural or political beliefs and understandings
	1.5.12acc.Pr6a: Make, explain and justify connections between artists or artwork and social, cultural and political history.
	1.5.12adv.Pr6a: Curate a collection of objects, artifacts or artwork to impact the viewer's understanding of social, cultural and/or political experiences.

**Anchor Standard 7:** Perceiving and analyzing products.

**Enduring Understanding:** Individual aesthetic and empathetic awareness developed through engagement with art can lead to understanding and appreciation of self, others, the natural world, and constructed environments. Visual arts influences understanding of and responses to the world.

**Essential Question(s):** How do life experiences influence the way you relate to art? How does learning about art impact how we perceive the world? What can we learn from our responses to art? What is visual art? Where and how do we encounter visual arts in our world? How do visual arts influence our views of the world?

**Practice:** Perceive

Standard #	Standard Description
1.5.12.Re7a	1.5.12prof.Re7a: Hypothesize ways in which art influences perception and understanding of human experiences.
	1.5.12acc.Re7a: Recognize and describe personal aesthetic and empathetic responses to the natural world and constructed environments.
	1.5.12adv.Re7a: Analyze how responses to art develop over time based on knowledge of and experience with art and life.

1.5.12.Re7b	1.5.12prof.Re7b: Analyze how one's understanding of the world is affected by experiencing visual arts.
	1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.
	1.5.12adv.Re7b: Determine the commonalities within a group of artists or visual arts attributed to a particular type of art, timeframe, or culture.

Anchor Standard 8: Interpreting intent and meaning.

**Enduring Understanding:** People gain insights into meanings of artworks by engaging in the process of art criticism.

**Essential Question(s):** What is the value of engaging in the process of art criticism? How can the viewer "read" a work of art as text? How does knowing and using visual art vocabulary help us understand and interpret works of art?

**Practice:** Interpret

Standard #	Standard Description
1.5.12.Re8a	1.5.12prof.Re8a: Interpret an artwork or collection of works, supported by relevant and sufficient evidence found in the work and its various contexts.
	1.5.12acc.Re8a: Identify types of contextual information useful in the process of constructing interpretations of an artwork or collection of works.
	1.5.12adv.Re8a: Analyze differing interpretations of an artwork or collection of works in order to select and defend a plausible critical analysis.

**Anchor Standards 9:** Applying criteria to evaluate products.

Enduring Understanding: People evaluate art based on various criteria.

**Essential Questions:** How does one determine criteria to evaluate a work of art? How and why might criteria vary? How is a personal preference different from an evaluation?

Practice: Analyze

Standard #	Standard Description
1.5.12.Re9a	1.5.12prof.Re9a: Establish relevant criteria in order to evaluate a work of art or collection of works.
	1.5.12acc.Re9a: Determine the relevance of criteria used by others to evaluate a work of art or collection of works.
	1.5.12adv.Re9a: Construct evaluations of a work of art or collection of works based on differing sets of criteria.

**Anchor Standard 10:** Synthesizing and relating knowledge and personal experiences to create products. **Enduring Understanding:** Through art-making, people make meaning by investigating and developing awareness of perceptions, knowledge, and experiences.

**Essential Question(s):** How does engaging in creating art enrich people's lives? How does making art attune people to their surroundings? How do people contribute to awareness and understanding of their lives and the lives of their communities through artmaking?

Practice: Synthesize

Standard #	Standard Description
1.5.12.Cn10a	1.5.12prof.Cn10a: Document the process of developing ideas from early stages to fully elaborated ideas.
	1.5.12acc.Cn10a: Utilize inquiry methods of observation, research and experimentation to explore other subjects through artmaking.
	1.5.12adv.Cn10a: Synthesize knowledge of social, cultural, historical, and personal life with art-making approaches to create meaningful works of art or design.

**Anchor Standard 11:** Relating artistic ideas and works within societal, cultural, and historical contexts to deepen understanding.

**Enduring Understanding:** People develop ideas and understandings of society, culture, and history through their interactions with and analysis of art.

**Essential Questions:** How does art help us understand the lives of people of different times, places, and cultures? How is art used to impact the views of a society? How does art preserve aspects of life?

Practice: Relate

Standard #	Standard Description
1.5.12.Cn11a	1.5.12prof.Cn11a: Describe how knowledge of culture, traditions and history may influence personal responses to art.
	1.5.12acc.Cn11a: Compare uses of art in a variety of societal, cultural and historical contexts and make connections to uses of art in contemporary and local contexts.
	1.5.12adv.Cn11a: Assess the impact of an artist or a group of artists on the beliefs, values and behaviors of a society.
1.5.12.Cn11b	1.5.12prof.Cn11b: Describe how knowledge of global issues, including climate change, may influence personal responses to art.
	1.5.12acc.Cn11b: Compare uses of art in a variety of societal, cultural and historical contexts and make connections to global issues, including climate change.
	1.5.12adv.Cn11b: Assess the impact of an artist or group of artists on global issues, including climate change.

## **English Companion Standards**

List grade-level appropriate companion standards for <u>History, Social Studies, Science and Technical Subjects</u> (CTE/Arts) 6-12. English Companion Standards are <u>required</u> in these subject/content areas.

Unit Addressed	Standard #	Standard Description
	NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
	NJSLSA.R3	Analyze how and why individuals, events, and ideas develop and interact over the course of a text
	NJSLSA.R4	Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
	NJSLSA.R5	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6	Assess how point of view or purpose shapes the content and style of a text.
	NJSLSA.R7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
	NJSLSA.R8	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
UNIT 1	NJSLSA.R10	Analyze and reflect on how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
	NJSLSA.W1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
	NJSLSA.W2	Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

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	NJSLSA.W3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.		
	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.		
UNIT 1	NJSLSA.W6	Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.		
	NJSLSA.W7	Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.		
UNIT 1	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.W9	Draw evidence from literary or informational texts to support analysis, reflection, and research.		
UNITS 2, 3, 4	NJSLSA.W10	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.		

## Career Awareness, Exploration, Preparation, and Training (Standard 9.2)

List appropriate units below for which standards will be addressed

By Grade 12		
Unit Addressed	Core Idea	Standard / Description
	There are strategies to improve one's professional value and marketability.	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.

	Career planning requires purposeful planning based on research, self-knowledge, and informed choices.	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.  9.2.12.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.  9.2.12.CAP.8: Determine job entrance criteria (e.g., education credentials, math/writing/reading comprehension tests, drug tests) used by employers in various industry sectors.  9.2.12.CAP.9: Locate information on working papers, what is required to obtain them, and who must sign them.  9.2.12.CAP.10: Identify strategies for reducing overall costs of postsecondary education (e.g., tuition assistance, loans, grants, scholarships, and student loans).  9.2.12.CAP.11: Demonstrate an understanding of Free Application for Federal Student Aid (FAFSA) requirements to apply for postsecondary education.
	An individual's income and benefit needs and financial plan can change over time.	9.2.12.CAP.12: Explain how compulsory government programs (e.g., Social Security, Medicare) provide insurance against some loss of income and benefits to eligible recipients. 9.2.12.CAP.13: Analyze how the economic, social, and political conditions of a time period can affect the labor market.
UNITS: 1-3	Securing an income involves an understanding of the costs and time in preparing for a career field, interview and negotiation skills, job searches, resume development, prior experience, and vesting and retirement plans.	9.2.12.CAP.14: Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.

Understanding income involves an analysis of payroll taxes, deductions and earned benefits.	9.2.12.CAP.15: Demonstrate how exemptions, deductions, and deferred income (e.g., retirement or medical) can reduce taxable income. 9.2.12.CAP.16: Explain why taxes are withheld from income and the relationship of federal, state, and local taxes (e.g., property, income, excise, and sales) and how the money collected is used by local, county, state, and federal governments. 9.2.12.CAP.17: Analyze the impact of the collective bargaining process on benefits, income, and fair labor practice. 9.2.12.CAP.18: Differentiate between taxable and nontaxable income from various forms of employment (e.g., cash business, tips, tax filing and withholding). 9.2.12.CAP.19: Explain the purpose of payroll deductions and why fees for various benefits (e.g., medical benefits) are taken out of pay, including the cost of employee benefits to employers and self-employment income. 9.2.12.CAP.20: Analyze a Federal and State Income Tax Return.
There are ways to assess a business's feasibility and risk and to align it with an individual's financial goals.	<ul> <li>9.2.12.CAP.21: Explain low-cost and low-risk ways to start a business.</li> <li>9.2.12.CAP.22: Compare risk and reward potential and use the comparison to decide whether starting a business is feasible.</li> <li>9.2.12.CAP.23: Identify different ways to obtain capital for starting a business</li> </ul>

## Life Literacies and Key Skills (Standard 9.4)

List appropriate units below for which standards will be addressed

By Grade 12			
Unit Addressed	Core Idea	Standard / Description	
UNITS: 3	Creativity and Innovation: With a growth mindset, failure is an important part of success.	9.4.12.CI.1: Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).	

UNITS: 2 & 3	Creativity and Innovation: Innovative ideas or innovation can lead to career opportunities.	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.CI.3: Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).
UNITS: 1-3	Critical Thinking and Problem-solving: Collaboration with individuals with diverse experiences can aid in the problem-solving process, particularly for global issues where diverse solutions are needed.	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). 9.4.12.CT.3: Enlist input from a variety of stakeholders (e.g., community members, experts in the field) to design a service learning activity that addresses a local or global issue (e.g., environmental justice). 9.4.12.CT.4: Participate in online strategy and planning sessions for course-based, school-based, or other projects and determine the strategies that contribute to effective outcomes.
UNITS: 3	Digital Citizenship: Laws govern the use of intellectual property and there are legal consequences to utilizing or sharing another's original works without permission or appropriate credit.	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.2: Compare and contrast international differences in copyright laws and ethics
UNITS: 3	Digital Citizenship: Laws govern many aspects of computing, such as privacy, data, property, information, and identity. These laws can have beneficial and harmful effects, such as expediting or delaying advancements in computing and protecting or infringing upon people's rights.	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.5: Debate laws and regulations that impact the development and use of software.
	Digital Citizenship: Cultivating online reputations for employers and academia requires separating private and professional digital identities.	9.4.12.DC.6: Select information to post online that positively impacts personal image and future college and career opportunities.

	Digital Citizenship: Digital communities influence many aspects of society, especially the workforce. The increased connectivity between people in different cultures and different career fields have changed the nature, content, and responsibilities of many careers.	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).
UNITS: 3	Digital Citizenship: Network connectivity and computing capability extended to objects, sensors and everyday items not normally considered computers allows these devices to generate, exchange, and consume data with minimal human intervention.  Technologies such as Artificial Intelligence (AI) and blockchain can help minimize the effect of climate change.	9.4.12.DC.8: Explain how increased network connectivity and computing capabilities of everyday objects allow for innovative technological approaches to climate protection.
	Global and Cultural Awareness: Solutions to the problems faced by a global society require the contribution of individuals with different points of view and experiences.	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.GeoGI.1, 7.1.IH.IPERS.6, 7.1.IL.IPERS.7, 8.2.12.ETW.3).
UNITS: 2-3	Information and Media Literacy: Advanced search techniques can be used with digital and media resources to locate information and to check the credibility and the expertise of sources to answer questions, solve problems, and inform the decision-making.	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.
	Information and Media Literacy: Digital tools such as artificial intelligence, image enhancement and analysis, and sophisticated computer modeling and simulation create new types of information that may have profound effects on society. These new types of information must be evaluated carefully.	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)

		<b>9.4.12.IML.4</b> : Assess and critique the appropriateness and impact of existing data visualizations for an intended audience (e.g., S-ID.B.6b, HS-LS2-4).
	Information and Media Literacy: In order for members of our society to participate productively, information needs to be shared accurately and ethically.	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). 9.4.12.IML.6: Use various types of media to produce and store information on climate change for different purposes and audiences with sensitivity to cultural, gender, and age diversity (e.g., NJSLSA.SL5).
	Information and Media Literacy: Accurate information may help in making valuable and ethical choices.	9.4.12.IML.7: Develop an argument to support a claim regarding a current workplace or societal/ethical issue such as climate change (e.g., NJSLSA.W1, 7.1.AL.PRSNT.4).
	Information and Media Literacy: Media have embedded values and points of view.	9.4.12.IML.8: Evaluate media sources for point of view, bias, and motivations (e.g., NJSLSA.R6, 7.1.AL.IPRET.6). 9.4.12.IML.9: Analyze the decisions creators make to reveal explicit and implicit messages within information and media (e.g., 1.5.12acc.C2a, 7.1.IL.IPRET.4).
UNITS: 3	Technology Literacy: Digital tools differ in features, capacities, and styles. Knowledge of different digital tools is helpful in selecting the best tool for a given task.	9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specific task (e.g., W.11-12.6.). 9.4.12.TL.2: Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.
	Technology Literacy: Collaborative digital tools can be used to access, record and share different viewpoints and to collect and tabulate the views of groups of people.	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).

## **Interdisciplinary Connections**

List any other content standards addressed as well as appropriate units

Standard 8.2		Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.
UNITS: 1-3	Engineering Design	• 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.2: Create scaled engineering drawings for a new product or system and make modification to increase optimization based on feedback. • 8.2.12.ED.3: Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis. • 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.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).
UNITS: 1-3	Interaction of Technology and Humans	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. • 8.2.12.ITH.2: Propose an innovation to meet future demands supported by an analysis of the potential costs, benefits, trade-offs, and risks related to the use of the innovation. • 8.2.12.ITH.3: Analyze the impact that globalization, social media, and access to open source technologies has had on innovation and on a society's economy, politics, and culture.
UNITS: 3	Nature Of Technology	• 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.

	Effects of Technology on the Natural World	• 8.2.12.ETW.1: Evaluate ethical considerations regarding the sustainability of environmental resources that are used for the design, creation, and maintenance of a chosen product. • 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.ETW.3: Identify a complex, global environmental or climate change issue, develop a systemic plan of investigation, and propose an innovative sustainable solution.
UNITS: 1-3	Ethics & Culture	• 8.2.12.EC.1: Analyze controversial technological issues and determine the degree to which individuals, businesses, and governments have an ethical role in decisions that are made. • 8.2.12.EC.2: Assess the positive and negative impacts of emerging technologies on developing countries and evaluate how individuals, non-profit organizations, and governments have responded. • 8.2.12.EC.3: Synthesize data, analyze trends, and draw conclusions regarding the effect of a technology on the individual, culture, society, and environment and share this information with the appropriate audience. • 8.2.12.ETW.4: Research historical tensions between environmental and economic considerations as driven by human needs and wants in the development of a technological product and present the competing viewpoints.

Other Interdisciplinary Content Standards Psychology Standards			
Unit Addressed	Content / Standard #	Standard Description	
Unit 2	Standard Area: Perspectives in Psychological Science	1.3 Describe perspectives employed to understand behavior and mental processes	
Unit 2	Standard Area: Consciousness	1.2 Distinguish between processing that is conscious (i.e., explicit) and other processing that happens without conscious awareness (i.e., implicit)	

## Pacing Guide (All Dates are approximate based on the school calendar)

Unit/ Topic	Month (w/Approx number of Teaching Days)
History of the Web	
1. The intended purpose of the World Wide Web	
2. Development of the www & interactive language	September/
Basic Code & Site Development	February
1. HTML & CSS	(~19 days)
2. Navigation	
3. Organization	
Basic Code & Site Development	
1. HTML & CSS	October/
2. Navigation	March
3. Organization	(~19 days)
Design: Elements & Principles	
1. Well-designed web	November/
2. Working with Color	April
3. Site map	(~16 days)
Creating Content	
1. Information based content	December/
2. Entertainment based content	May
3. Interactive content	(~15 days)
4. Preparing/saving files for the web publishing	
Creating Content	
Information based content	T/ T
2. Entertainment based content	January/ June (~18 days)
3. Interactive content	(~10 days)
4. Preparing/saving files for the web publishing	

# **Units**

Contact the Content Supervisor for unit details.