**Orange High School**

 Course Syllabus

 **Web Design**



| **Course Information** | **Teacher Information** |
| --- | --- |
| Credits: 2.5 | Name: **Ms. F. Martin**Phone: 973-677-4050E-Mail: martinfe@orange.k12.nj.us |
| Marking Period: Half Year Course (Semester 2)Program: CTE - **Web Design** |
| Class Location: 171 |
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**Instructor:** Ms. F. Martin - MA New York University, BA Rutgers University

**Course Description:**

| Students will be instructed on web design applications on PC platform. The various software programs and digital applications students will be exposed to include Adobe Creative Suite, HTML, and Google Apps. Students will learn to design and publish original websites for personal use and for business. Students will leave the course with a strong foundation in web design which will enable them to independently create websites. Such a foundation will enhance their prospects for pursuing higher education in graphic design and web design and for becoming professionals in the field.   |
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**Course Competencies/ Learning Objectives:**

Students will be able to:

* Analyze HTML code on any web page online.
* Interpret the intricacies of coding with HTML.
* Create a functional web page utilizing HTML, and write code for color backgrounds, images, and formatted

 text.

* Compile and manage photography files for original animation sequences.
* Plan the sequence and timing of an animated GIF.
* Create an animated GIF by editing 3 or more photos, storing them correctly, merging them in a timeline, managing their frame rates, and saving the file correctly in GIF format.
* Create an original vector graphic utilizing Adobe Illustrator.
* Produce an original logo and create a website banner in GIF format.
* Design a logo to represent a brand, a service or individuals.
* Design a banner containing a mandala-inspired graphic containing multiple colors, forms, a logo, and typography.
* Identify website architecture for business sites online.
* Create website architecture for a business.
* Design a business website with original website architecture that includes wireframing, organized content on every page, site mapping (4 pages minimum), and a cohesive layout.
* Create a website with a WYSIWYG Editor (Adobe applications or an online editor).
* Design an original website containing an original web banner, background colors and matching typography/formatted text.

**Student Evaluation**

The grading system for the Career and Technical Education Department at Orange High School is as follows:

| Authentic Assessments (9) | - | 25% |
| --- | --- | --- |
| Tests (4)Quizzes (4) | -- | 25%20% 20% 10% |
| Classwork Assignments and Class Participation | - |
| Homework (9) | - |

**Attendance Policy:**

**Purpose of the Student Attendance Policy**

The purpose of the Orange High School Attendance Policy is to have each student attend all classes, arriving on time and participating fully. Students and parents should familiarize themselves with the provision and procedures of the policy. It is expected that parents will support the intent of the policy and encourage their children to maintain good attendance. Official school attendance is taken during the attendance period daily. Classroom attendance is taken every period.

Students are expected to attend every class, study hall, independent study and homeroom period. Board Policy requires each student to be present for at least 90% of class meetings in order to be eligible to receive credit. The number of absences in each class **MAY NOT EXCEED:**

**18 Cumulative Absences Full Year Course**

**9 Cumulative Absences Semester Course**

**5 Cumulative Absences Quarter Course (Health)**

**14 Cumulative Absences Physical Education**

**Classroom Expectations:**

1. Students will come to class on time prepared and ready to learn.
2. Students will complete all assignments, including homework, by all deadlines. Make-up work is only accepted after an excused absence. It is your responsibility to see me for your work before or after school.
3. All students will be silent and respectful while other students presenting their projects/films.
4. The teachers and students will work together for a respectful, safe classroom.
5. Participation in class discussions will enhance all students’ learning experiences.
6. Students are expected to have all assigned projects completed; this may require some reading to be completed outside of the classroom.
7. Cell phones, iPods, mp3 players, and any other personal electronic items are prohibited in class at any time.

**Class Requirements:**

Students will be required to complete and pass writing assignments, research projects, tests/exams, and homework. Students will also be required to complete projects outside of class, participate meaningfully and respectfully in classroom discussions, maintain good attendance, have a respectful and positive attitude, and come to class ready to learn!

**Academic Dishonesty:**

 Pupils are expected to be honest in all of their academic work. To ensure the integrity of Orange High School’s educational program, a strict adherence to our district policy of academic dishonesty will be enforced. Students are expected to be honest in order to learn and grow as responsible and ethical citizens. Any breach of this standard endangers the learning process and impugns the integrity of the entire school community. The purpose of education is to prepare students to become lifelong learners, and dishonesty undermines and inhibits that process. No forms of personal and/or academic misrepresentation are permitted. A student, whether cheating alone or helping another person to cheat, will be subject to the disciplinary procedure.

Students will be expected to:

1. Complete his/her own academic work;

2. Refrain from sharing assignments unless authorized to do so;

3. Refrain from engaging in plagiarism when doing research; and

4. Adhere to classroom academic standards when testing.

The District subscribes to Turnitin.com, an electronic resource for helping to detect and prevent plagiarism. If required to do so by their teachers, students must submit their work to the website before presenting the work to their teacher.

**Definition:**

**Cheating:** is defined as any misrepresentation of one’s academic work.

**Personal Misrepresentation:** includes attendance records; presenting falsified notes, passes or names; and any other deliberate misrepresentation to school authorities, other than academic work.

**Academic Misrepresentation:** includes but is not limited to, stealing, copying or providing answers on any homework, quiz, test, exam, report, essay or other school assignments, and using sources without proper documentation (plagiarism) as well as changing grades.

**Methodology**

A combination of lecture, class discussion, presentations, videos, cooperative learning, and problem-based learning will be used in this course. Grades will be determined by the satisfactory and timely completion of assignments. The grade of each assignment is based on the prerequisite given for each assignment. Below is an overview of topic/ units and major assessments/assignments for this course. Please note dates/timeframes are subject to change and are an estimate.

| **Unit/ Topic** | **Course Activities** | **Assessments/Assignments** | **Timeframe** |
| --- | --- | --- | --- |
| HTML | Read, interpret, analyze, research, critique, HTML Code. Create web pages by writing and developing HTML Code. | Research, projects, and tests. | 5 weeks |
| WYSIWYG Editors | Create website architecture for a business. Design a business website with original website architecture that includes wireframing, organized content, site mapping , and a cohesive layout. | Research, projects, and tests. | 8 weeks |
| LOGOS | Create an original vector graphic utilizing Adobe Illustrator.  Produce an original logo and create a website banner in GIF format.  | Research and projects. |  3 Weeks |
| UXUI Design  Website Architecture | User Experience (UX) and User Interface (UI) Design. UXUI Processes in Development of Functional and Successful Websites. Designing Websites with Organized Information, Hierarchy and User Needs.  | Research and projects. |  2-3 Weeks |
| ANIMATED GIFS | Plan the sequence and timing of an animated GIF.  Create an animated GIF by photos, managing a timeline and frame rates. | Research and projects. |  2 weeks |

Please acknowledge that you have read and understand the information explained above. Students will return this page to their teachers one week from the date the syllabus is received by the student.

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Student Signature Print Name

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Parent/Guardian Signature Print Name

**CTE Addendum/ Standards - Web Design**

Unit 1 - HTML Code

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.

 9.3.12.AR.3 Analyze the lifestyle implications and physical demands required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.

9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR‐VIS.3 Analyze and create two and three‐dimensional visual art forms using various media.

9.3.12.AR‐VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.

9.3.12.AR‐VIS.1 Describe the history and evolution of the visual arts and its role in and impact on society.

9.3.12.AR‐TEL.3 Demonstrate decision making, problem‐solving techniques and communication skills when providing services for customers.

9.3.IT‐WD.1 Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT‐WD.2 Apply the design and development process to produce user‐focused Web and digital communications solutions.

9.3.IT‐WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT‐WD.5 Develop, administer and maintain Web applications.

9.3.IT‐WD.6 Design, create and publish a digital communication product based on customer needs.

9.3.IT‐WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT‐WD.8 Implement quality assurance processes to deliver quality digital communication products and services.

9.3.IT‐WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

1.5.12acc.Cr2a: Through experimentation, practice and persistence, demonstrate acquisition of skills and knowledge in a chosen art form.

1.2.12acc.Cr1a: Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.

1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.

1.5.12acc.Cr2b: Demonstrate awareness of ethical implications of making and distributing creative work.

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

9.4.12.TL.3: Analyze the effectiveness of the process and quality of collaborative environments.

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).

Technology/Computer Science and Design Thinking

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.IML.1: Compare search browsers and recognize features that allow for filtering of information.

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)

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 Standards)

RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RL.11-12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (e.g., Shakespeare as well as other authors.)

7.1.IH.IPRET.5: Infer the meaning of some unfamiliar words and phrases in new formal and informal contexts.

Unit 2 - Logos

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR‐VIS.3 Analyze and create two and three‐dimensional visual art forms using various media.

9.3.12.AR‐VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.

9.3.12.AR‐TEL.3 Demonstrate decision making, problem‐solving techniques and communication skills when providing services for customers.

9.3.IT‐WD.1 Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT‐WD.6 Design, create and publish a digital communication product based on customer needs.

9.3.IT‐WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT‐WD.8 Implement quality assurance processes to deliver quality digital communication products and services.

9.3.IT‐WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

1.2.12acc.Cr1a: Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.

1.5.12adv.Cr2a: Experiment, plan and make multiple works of art and design that explore a personally meaningful theme, idea, or concept.

1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.

1.5.12acc.Cr2a: Through experimentation, practice and persistence, demonstrate acquisition of skills and knowledge in a chosen art form.

1.5.12adv.Cr1a: Visualize and generate art and design that can affect social change.

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.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).

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.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.).

Technology/Computer Science and Design Thinking

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.).

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.2: Redesign an existing product to improve form or function.

Interdisciplinary Standards

RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RL.11-12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (e.g., Shakespeare as well as other authors.)

8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations. a. Lines are transformed to lines and line segments to line segments of the same length b. Angles are transformed to angles of the same measure c. Parallel lines are transformed to parallel lines.

8.G.CO D. Make geometric constructions 12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line

Unit 3 - WYSIWYG Editors

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.

9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.

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9.3.12.AR‐VIS.1 Describe the history and evolution of the visual arts and its role in and impact on society.

9.3.12.AR‐TEL.3 Demonstrate decision making, problem‐solving techniques and communication skills when providing services for customers.

9.3.IT‐WD.1 Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT‐WD.2 Apply the design and development process to produce user‐focused Web and digital communications solutions.

9.3.IT‐WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT‐WD.6 Design, create and publish a digital communication product based on customer needs.

9.3.IT‐WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT‐WD.8 Implement quality assurance processes to deliver quality digital communication products and services.

9.3.IT‐WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

1.5.12acc.Cr2a: Through experimentation, practice and persistence, demonstrate acquisition of skills and knowledge in a chosen art form.

1.2.12acc.Cr1a: Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.

1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.

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.

1.5.12acc.Cr2b: Demonstrate awareness of ethical implications of making and distributing creative work.

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.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).

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.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.).

Technology/Computer Science and Design Thinking

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.2: Redesign an existing product to improve form or function.

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.

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.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).

Interdisciplinary Standards

RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RL.11-12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (e.g., Shakespeare as well as other authors.)

8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations. a. Lines are transformed to lines and line segments to line segments of the same length b. Angles are transformed to angles of the same measure c. Parallel lines are transformed to parallel lines.

8.G.CO D. Make geometric constructions 12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line

Unit 4 - UXUI Design and Website Architecture

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.5 Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology & Communications Career Pathways.

9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR‐VIS.3 Analyze and create two and three‐dimensional visual art forms using various media.

9.3.12.AR‐VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.

9.3.12.AR‐TEL.3 Demonstrate decision making, problem‐solving techniques and communication skills when providing services for customers.

9.3.IT‐WD.1 Analyze customer requirements to design and develop a Web or digital communication product.

9.3.IT‐WD.2 Apply the design and development process to produce user‐focused Web and digital communications solutions.

9.3.IT‐WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT‐WD.6 Design, create and publish a digital communication product based on customer needs.

9.3.IT‐WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT‐WD.8 Implement quality assurance processes to deliver quality digital communication products and services.

9.3.IT‐WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

1.2.12acc.Cr1a: Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.

1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.

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.

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.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).

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).

Technology/Computer Science and Design Thinking

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.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.

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.3: Evaluate several models of the same type of product and make recommendations for a new design based on a cost benefit analysis.

Interdisciplinary Standards

RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RL.11-12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (e.g., Shakespeare as well as other authors.) \

8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations. a. Lines are transformed to lines and line segments to line segments of the same length b. Angles are transformed to angles of the same measure c. Parallel lines are transformed to parallel lines.

8.G.CO D. Make geometric constructions 12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line

Unit 5 - Animated GIFs

9.3.12.AR.1 Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology & Communications Career Cluster.

9.3.12.AR.4 Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.

9.3.12.AR.6 Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology & Communications Career Cluster.

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9.3.IT‐WD.2 Apply the design and development process to produce user‐focused Web and digital communications solutions.

9.3.IT‐WD.4 Demonstrate the effective use of tools for digital communication production, development and project management.

9.3.IT‐WD.6 Design, create and publish a digital communication product based on customer needs.

9.3.IT‐WD.7 Evaluate the functionality of a digital communication product using industry accepted techniques and metrics.

9.3.IT‐WD.8 Implement quality assurance processes to deliver quality digital communication products and services.

9.3.IT‐WD.10 Comply with intellectual property laws, copyright laws and ethical practices when creating Web/digital communications.

1.5.12acc.Cr2a: Through experimentation, practice and persistence, demonstrate acquisition of skills and knowledge in a chosen art form.

1.2.12acc.Cr1a: Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.

1.5.12acc.Re7b: Evaluate the effectiveness of visual artworks to influence ideas, feelings, and behaviors of specific audiences.

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.

1.5.12acc.Cr2b: Demonstrate awareness of ethical implications of making and distributing creative work.

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.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).

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.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).

Technology/Computer Science and Design Thinking

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.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)

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.2: Redesign an existing product to improve form or function.

Interdisciplinary Standards

RI.2.7. Explain how specific illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RL.11-12.4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (e.g., Shakespeare as well as other authors.)

8.G.A.1 Verify experimentally the properties of rotations, reflections, and translations. a. Lines are transformed to lines and line segments to line segments of the same length b. Angles are transformed to angles of the same measure c. Parallel lines are transformed to parallel lines

8.G.CO D. Make geometric constructions 12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line