| ***Introduction to Computer Graphics***  ***Unit 1: Graphic Design, Elements of Art and Principles of Design***  ***Timeline: Weeks 1-3*** | | | | | |
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| **Targeted Standards** (Write the overall NJSLS standards that are most applicable to this unit.).  Throughout history the arts have provided essential means for individuals and communities to express their ideas, experiences, feelings, and deepest beliefs. Each discipline shares common goals but approaches them through distinct approaches and techniques. Understanding works of art provides insights into an individual’s own culture and society, as well as those of others, while also providing opportunities to access, express and integrate meaning across a variety of content areas.  ***Visual and Performing Arts: 1.5 Visual Arts Standards***  **Standard 1:** Proficient 1.5.12prof.Cr1a: Use multiple approaches to begin creative endeavors.  **Standard 2**: Proficient 1.5.12prof.Cr2a: Engage in making a work of art or design without having a preconceived plan.  **Standard 3:** Proficient 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.  **Standard 4**: Proficient 1.5.12prof.Pr4a: Analyze, select and curate artifacts and/or artworks for presentation and preservation.  **Standard 8:** Proficient 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.  **Standard 9:** Proficient 1.5.12prof.Re9a: Establish relevant criteria in order to evaluate a work of art or collection of works.  ***Visual and Performing Arts: 1.2 Media Arts Standards***  **Standard 1:** Proficient 1.2.12prof.Cr1a: Formulate multiple ideas using generative methods to develop artistic goals and solve problems in media arts creation processes.  **Standard 2:** Proficient 1.2.12prof.Cr2a: Organize and design artistic ideas for media arts productions.  **Standard 3:** Proficient 1.2.12prof.Cr3a: Understand the deliberate choices in organizing and integrating content, stylistic conventions, and media arts principles such as emphasis and tone.  **Standard 9:** Proficient 1.2.12prof.Re9a: Evaluate media art works and production processes at decisive stages, using identified criteria and considering context and artistic goals  **Standard 10:** Proficient 1.2.12prof.Cn10a: Access, evaluate and integrate personal and external resources to inform the creation of original media artworks, such as experiences, interests and cultural experiences. | | | | | |
| **Rationale and Transfer Goals** :  Introduction to Computer Graphics is one of the first courses in the high school art sequence. It is primarily an exploration of the fundamental elements of art and principles of design and design (line, color, value, shape/form, texture, space, balance, pattern, contrast, movement/rhythm, proportion, emphasis, and unity) through experiences in bitmap design programs (such as Adobe Photoshop and online Pixlr), vector design programs (such as Adobe Illustrator and online Corel Vector), Page Layout programs (such as Adobe InDesign and online Lucidpress), critique, and art/design appreciation. Introduction to Computer Graphics provides opportunities to increase understanding and appreciation of the creative process in self and to increase appreciation of all creative efforts of others. Students are given the opportunity to exhibit their work during the school year. | | | | | |
| **Enduring Understandings:** What are the most essential conclusions that students should be guided towards throughout this unit?   * Graphic design is the art or profession of visual communication that combines images, words, and ideas to convey information to an audience, especially to produce a specific effect. In other words, graphic design is communication design; It’s a way of conveying ideas through visuals and design. * The elements of art are the building blocks of an artwork: line, shape, form, value, color, texture, and space. They are the tools artists use when creating an artwork. The principles of design are how those building blocks are arranged: balance, pattern, rhythm/movement, proportion, contrast, emphasis, variety, and unity. Additional graphic design principles are proximity, alignment, similarity, space, and hierarchy. * In any work of art there is a thought process for the arrangement and use of the elements of design. The artist and designer who works with the principles of good composition will create a more interesting piece; it will be arranged to show a pleasing rhythm and movement. The center of interest will be strong and the viewer will not look away, instead, they will be drawn into the work. A good knowledge of composition is essential in producing good artwork. | | | | | |
| **Essential Questions**: What are the questions that will guide critical thinking about the content of this unit? Essential questions should, in part, be thought-starters toward the enduring understandings.   * What is graphic design and its role and purpose in today’s society? * What are the elements of art and principles of design (foundations of art/design)? * How are the art elements and design principles used to create aesthetically pleasing compositions? * Why is it important to understand the art elements and design principles when looking at and analyzing art and graphic designs? | | | | | |
| **Content/Objectives** | | | **Instructional Actions** | | |
| **Content**  ***What students will know*** | **Skills**  ***What students will be able to do*** | | **Activities/Strategies**  ***How we teach content and skills*** | | **Evidence (Assessments)**  ***How we know students have learned*** |
| \* Students will learn and understand the elements of art and principles of design as well as Gestalt principles.  \* Students will learn and understand the processes and techniques in art and design.  \* Students will self critique while planning and executing their projects.  \* Students will manage time and materials to complete projects.  \*Students will understand that graphic design has form and function. | \* Students will apply terms and procedures essential to elements of art and principles of design.  \* Students will communicate specific vocabulary comprehension through creation in computer programs.  \* Students will be able to understand aspects of elements of art and principles of design through various mediums used by graphic designers. | | Activity 1: Students will be introduced to graphic design by creating a beginning practice project and overview of the field of graphic design, understanding it has a function as well as form.  Activity 2: Students will demonstrate an understanding of elements of art and principles of design, as well as Gestalt Principles through creating a series of computer graphic designs and projects to illustrate each one.  Activity 3: Apply the knowledge of art and graphic design elements and principles to analyze, then improve a graphic design.  Activity 4: Students will be able to research various graphic designers and graphic design careers through research. (ongoing) | | \*Observation of student progress.  \*Projects and activities  \*Quizzes and tests  \*Benchmark checkpoints towards final student summative portfolio  \*Formative: Visual Arts Project  Student Portfolio kept digitally as well as actual portfolio (if applicable).  [Assessments](https://drive.google.com/drive/folders/1zd_78NSZAZE952MHzuG6iTEFCOfLC5MK?usp=share_link) |
| **Spiraling for Mastery**  **Where does this unit spiral back to other units from this or previous years in order to ensure that students retain mastery of what they’ve learned?** | | | | | |
| **Content or Skill for this Unit** | | **Spiral Focus from Previous Unit** | | **Instructional Activity** | |
| \*Students will be able to know elements of art and principles of design and how to utilize these properties to unify a work of art and design.  \*Students will be able to observe a work of design and distinguish what elements of art and principles of design are being utilized in a work of art.  \*Students will use the elements of art and principles of design to evaluate and modify work throughout the rest of the course. | | Students will be coming into this Introductory course with little to no knowledge or skill level. Students will be learning design aspects of the visual arts through the elements of art and principles of design. | | Students will gain knowledge of what graphic design is and how it is used in today’s society and everyday life. Students will apply graphic design foundations to projects and activities. Students will observe exemplary examples of graphic design through studying various graphic designer’s work (ongoing). Students will explore graphic design career opportunities and possibilities (ongoing). | |
| **21st Century Skills:**  \*Students will demonstrate the creative, critical thinking, collaboration, and problem-solving skills needed to function successfully.  \*Students will demonstrate an understanding and skill set through media, techniques, and processes making connections between visual arts and other disciplines, and understanding the visual arts in relation to history and cultures.  Career Readiness, Life Literacies, and Key Skills 9.4 Life Literacies and Key Skills  Critical Thinking and Problem-solving:  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).  Digital Citizenship:  9.4.8.DC.2: Provide appropriate citation and attribution elements when creating media products (e.g., W.6.8).  Global and Cultural Awareness:  9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a).  Information and Media Literacy:  9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b).  9.4.8.IML.7: Use information from a variety of sources, contexts, disciplines, and cultures for a specific purpose (e.g., 1.2.8.C2a, 1.4.8.CR2a, 2.1.8.CHSS/IV.8.AI.1, W.5.8, 6.1.8.GeoSV.3.a, 6.1.8.CivicsDP.4.b, 7.1.NH. IPRET.8).  9.4.8.IML.9: Distinguish between ethical and unethical uses of information and media (e.g., 1.5.8.CR3b, 8.2.8.EC.2).  9.3 – Career & Technical Education (CTE) Content Area: 21st Century Life and Careers  Pathway: Printing Technology (AR‐PRT)  9.3.12.AR‐PRT.2 Demonstrate the production of various print, multimedia or digital media products.  Pathway: Visual Arts (AR‐VIS)  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‐VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas.  9.3.12.AR‐VIS.3 Analyze and create two and three‐dimensional visual art forms using various media. | | | | | |
| **Key resources:**  \*Professional organizations: AIGA-The American Institute of Graphic Arts, NAEA-National Art Education Association, AENJ-Art Educators of New Jersey, ISTE-International Society for Technology in Education, PSA-Photographic Society of America, etc.  \*Online: Adobe Education Exchange, Creative Live, ICP-International Center of Photography, Aperture Foundation, Study.com, Kahoot.com, Edpuzzle.com, Quizizz.com, Quizlet.com, Virtual Instructor.com, The Art of Education, Scholasticarts.com, etc.  \*Museum resources from national, regional and local museums  \*Teacher-generated resources. | | | | | |
| **Intersections of History:**  **Black:**  Use of Black artists, designers and makers to foster experiences in American and world history through the visual arts and design.  **Hispanic:** Use of Hispanic artists, designers and makers to foster experiences in American and world history through the visual arts and design.  **Women:** Use of Women artists, designers and makers to foster experiences in American and world history through the visual arts and design.  **LGBTQ:** Use of LGBTQ artists, designers and makers to foster experiences in American and world history through the visual arts and design.  In addition, all the above may be used to influence personal choices for creating relevant Art & Graphic Design projects which deal with these topics. | | | | | |
| **Important Vocabulary:** Elements of art (Line, Shape, form, Space, color, texture, and value) Principles of Art (contrast, Unity, Harmony, Pattern, balance, emphasis, movement) Fine art, Functional Art, Graphic Design, Gestalt Principles of Design (Proximity, Alignment, Contrast, Repetition, Similarity, Hierarchy) | | | | | |
| **Interdisciplinary Connections:**  ELA:  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.  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.  Computer Science and Design Thinking:  8.2.8.ED.2: Identify the steps in the design process that could be used to solve a problem.  8.2.8.ITH.2: Compare how technologies have influenced society over time.  Mathematics:  Math A-CED.A.1: Create equations and inequalities in one variable and use them to solve problems.  Math 6.RP.A.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities | | | | | |