

# Computer Graphics II Curriculum Maps

[Unit 1: Introduction](#)

[Unit 2: Photoshop Review](#)

[Unit 3: "Cubee" Illustrator Review](#)

[Unit 4: Portfolio Project](#)

[Unit 5: 20th Century Design Styles](#)

[Unit 6: Branding Project](#)

[Unit 7: Research Paper](#)

[Unit 8: Package Design](#)

[Unit 9: Animation Design](#)

[Unit 10: 3-D Design](#)

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 1: Introduction</b>
<b>Big Idea/Rationale</b>	TSW be introduced to the core concepts of what the CG&D2 class will cover, as well as classroom rules. A review of design and its purpose will be presented.
<b>Enduring Understanding (Mastery Objective)</b>	TSW learn about the designed world as well as opportunities for employment, and educational needs.
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How is the design process used to solve the problems that are presented to the students?</li> <li>• What are some examples in the real world of how design was used to solve a problem?</li> <li>• How will students be evaluated for their comprehension?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of real-world examples</li> <li>• Presentation of student work samples</li> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>8.1.12.A.2</b> Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</li> <li>• <b>9.2.12.A.3</b> Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.</li> </ul>
<b>Materials and Resources</b>	Projector Laptop Computer Photoshop
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 2: Photoshop Review</b>
<b>Big Idea/Rationale</b>	TSW be reintroduced to Photoshop and the process of design after their long summer break.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW be reunited with the Photoshop image processing program, as well as learning two new tools (Clone Tool and Lighting FX filter).</li> <li>• TSW brush up on their storytelling skills by creating a new, original image from three seemingly unrelated images (one of which must be an original photograph taken as part of the class)</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How can Photoshop be used to compose original images?</li> <li>• How can one connect the dots between seemingly unrelated subject matter (a basic brainstorming technique)?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of student work samples</li> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>8.1.12.A.2</b> Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</li> <li>• <b>9.2.12.A.3</b> Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Projector</li> <li>• Laptop Computer</li> <li>• Photoshop</li> <li>• Digital cameras</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 3: "Cubee" Illustrator Review</b>
<b>Big Idea/Rationale</b>	<ul style="list-style-type: none"> <li>• TSW be reintroduced to Illustrator and the process of design after their long summer break.</li> <li>• TSW develop a "Cubee" representation that is a reflection of themselves and their own feelings about their personality traits.</li> </ul>
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW be reunited with the Illustrator drawing program.</li> <li>• TSW develop a "Cubee" representation that is a reflection of themselves and their own feelings about their personality traits.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How can Illustrator be used to compose an original work of art and design?</li> <li>• What positive character traits could be used to define a person and render an image of them, with minimal drawing skills?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of student work samples</li> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>1.3.12.D.3</b> Organize an exhibit of personal works of visual art that convey a high level of understanding of how the expression of ideas relates to the art media, art mediums, and techniques used.</li> <li>• <b>8.1.12.A.2</b> Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</li> <li>• <b>9.2.12.A.3</b> Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Projector</li> <li>• Computer</li> <li>• Illustrator</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 4: Portfolio Project</b>
<b>Big Idea/Rationale</b>	TSW record and reflect on their work and create a portfolio of such work.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW understand how to organize their work into a published print project.</li> <li>• TSW learn how to use Adobe InDesign to create a multi-page document.</li> <li>• TSW learn how to self-critique their work and describe their working process.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How can InDesign be used to create an original portfolio of work?</li> <li>• How a multi-page document is organized, formatted and maintained?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of student work samples</li> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>8.1.12.A.2</b> Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</li> <li>• <b>9.1.12.B.1</b> Present resources and data in a format that effectively communicates the meaning of the data and its implications for solving problems, using multiple perspectives.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Projector</li> <li>• Computer</li> <li>• Illustrator</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 5: 20th Century Design Styles</b>
<b>Big Idea/Rationale</b>	TSW learn about Art Nouveau, Art Deco, Googie and Atomic/Space Age, which were the dominant design styles of the first half of the 20th century.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW understand what defines each of the four design styles.</li> <li>• TSW learn how each design style was influenced by world events.</li> <li>• TSW learn how to interpret one of the four styles and combine it with their own personal aesthetic.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• What purpose does design serve when interpreting world events?</li> <li>• How can a previously dominant style of design be updated for use in a contemporary setting without appearing to be dated?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of student work samples</li> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.1.12.D.2</b> Translate literary, musical, theatrical, and dance compositions by using them as stimulus/inspiration for corresponding visual artworks.</li> <li>• <b>1.2.12.A.1</b> Determine how dance, music, theatre, and visual art have influenced world cultures throughout history.</li> <li>• <b>1.2.12.A.2</b> Justify the impact of innovations in the arts (e.g., the availability of music online) on societal norms and habits of mind in various historical eras.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>1.4.12.B.3</b> Determine the role of art and art-making in a global society by analyzing the influence of technology on the visual, performing, and multimedia arts for consumers, creators, and performers around the world.</li> <li>• <b>8.1.12.A.2</b> Produce and edit a multi-page document for a commercial or professional audience using desktop publishing and/or graphics software.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Projector</li> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> <li>• Adobe Photoshop</li> </ul>
<b>Notes</b>	<ul style="list-style-type: none"> <li>• <a href="#">Art Deco Album project 2011.pdf</a></li> <li>• <a href="#">Art Deco History 2011.pdf</a></li> <li>• <a href="#">Art Deco Presentation.ppt</a></li> </ul>

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 6: Branding Project</b>
<b>Big Idea/Rationale</b>	TSW learn how to devise and develop the brand identity for a fictional company.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW learn how some well-known companies have evolved their corporate brands over time.</li> <li>• TSW learn how to develop a basic brand identity from the ground floor.</li> <li>• TSWBAT apply their branding solution to a wide variety of products.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• What is the lasting impression of a company's brand?</li> <li>• How does a brand help communicate the company's message?</li> <li>• Is the application of a brand more than just slapping a logo on merchandise and printed materials?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Presentation of student work samples</li> <li>• Instructor - created notes and worksheets</li> <li>• Product templates</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.1.12.D.1</b> Distinguish innovative applications of the elements of art and principles of design in visual artworks from diverse cultural perspectives and identify specific cross-cultural themes.</li> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>8.1.12.A.4</b> Create a personalized digital portfolio that contains a résumé, exemplary projects, and activities, which together reflect personal and academic interests, achievements, and career aspirations.</li> <li>• <b>8.2.12.E.1</b> Use the design process to devise a technological product or system that addresses a global issue, and provide documentation through drawings, data, and materials, taking the relevant cultural perspectives into account throughout the design and development process.</li> <li>• <b>9.1.12.E.1</b> Create messages for different purposes and audiences with sensitivity to cultural, gender, and age diversity, using various digital media outlets.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Projector</li> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> </ul>

	<ul style="list-style-type: none"><li>• Adobe Photoshop</li></ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 7: Research Paper</b>
<b>Big Idea/Rationale</b>	TSW learn about a designer and demonstrate that knowledge in the form of a two-page biographical print layout.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW learn the background of a selected designer in order to understand how their lives may have affected their careers.</li> <li>• TSW learn what kind of training is required to become a professional designer</li> <li>• TSW develop skills to evaluate a piece of work created by the designer</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• What does a world-class designer do?</li> <li>• What kind of training is needed to become a designer?</li> <li>• What is involved in creating a real-world design project?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Instructor - created notes</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>8.2.12.C.3</b> Evaluate the positive and negative impacts in a design by providing a digital overview of a chosen product and suggest potential modifications to address the negative impacts.</li> <li>• <b>9.3.12.C.3</b> Develop personal interests and activities that support declared career goals and plans.</li> <li>• <b>9.3.12.C.5</b> Identify transferable skills in career choices and design alternative career plans based on those skills.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> <li>• Adobe Photoshop</li> <li>• Adobe InDesign</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 8: Package Design</b>
<b>Big Idea/Rationale</b>	<ul style="list-style-type: none"> <li>• TSW learn how to develop a unique product concept and create original packaging for it.</li> </ul>
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW learn how to conceptualize a product that could be brought to the marketplace in order to have something to develop packaging for.</li> <li>• TSW learn how to design packaging in a 3-D environment.</li> <li>• TSW learn how to develop packaging that can act as an effective marketing tool.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How can we think up of new and useful products?</li> <li>• How do we design packaging for consumer products?</li> <li>• How can we use packaging as an effective marketing tool?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Instructor - created notes</li> <li>• Real-world examples of effective packaging solutions</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>9.3.12.C.3</b> Develop personal interests and activities that support declared career goals and plans.</li> <li>• <b>9.3.12.C.5</b> Identify transferable skills in career choices and design alternative career plans based on those skills.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> <li>• Adobe Photoshop</li> <li>• Adobe InDesign</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics II	<b>Unit 9: Animation Design</b>
<b>Big Idea/Rationale</b>	<ul style="list-style-type: none"> <li>• Learning how to tell a story in a sequential manner can help students learn how to plan for presentations and for complicated career projects that involve many steps and many component pieces.</li> </ul>
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• In order to be successful when developing a project that is complicated, we must learn how to keep ourselves organized and manage our time effectively.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• How did animation originate?</li> <li>• How do writers develop ideas?</li> <li>• How do we create visual representations of original characters?</li> <li>• How does animation work?</li> <li>• How do we use Photoshop to create original animations?</li> </ul>
<b>Content (Subject Matter)</b>	View historical examples of the animation process Introduction of the animation process Demonstration that uses Photoshop to merge the old-school method of hand animation with modern digital animation.
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>9.1.12.A.1</b> Apply critical thinking and problem-solving strategies during structured learning experiences.</li> <li>• <b>9.3.12.C.3</b> Develop personal interests and activities that support declared career goals and plans.</li> <li>• <b>9.3.12.C.5</b> Identify transferable skills in career choices and design alternative career plans based on those skills.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> <li>• Adobe Photoshop</li> </ul>
<b>Notes</b>	

<b>Grade:</b> 10-12 <b>Subject:</b> Computer Graphics	<b>Unit 10: 3-D Design</b>
<b>Big Idea/Rationale</b>	TSW develop a three-dimensional prototype of a complex object of original design.
<b>Enduring Understanding (Mastery Objective)</b>	<ul style="list-style-type: none"> <li>• TSW learn how to use Design Thinking skills such as brainstorming and prototyping</li> <li>• TSWBAT develop plans for a 3-D object that accomplishes a task</li> <li>• TSWBAT create the component pieces for their object</li> <li>• TSWBAT assemble the pieces into a completed 3-D object</li> <li>• TSW demonstrate that their completed design is able to accomplish the required task.</li> </ul>
<b>Essential Questions (Instructional Objective)</b>	<ul style="list-style-type: none"> <li>• Given a task to complete and a set of parameters, how do we brainstorm original ideas to fulfill the task?</li> <li>• How do we plan for the development of a 3-D object?</li> <li>• How do we construct a prototype?</li> <li>• How do we test our prototype to make sure it works?</li> </ul>
<b>Content (Subject Matter)</b>	<ul style="list-style-type: none"> <li>• Instructor - created notes and worksheets</li> <li>• Videos from "Design in the Classroom" website</li> <li>• Real-world examples of the chosen objects</li> </ul>
<b>Skills/ Benchmarks (CCSS Standards)</b>	<ul style="list-style-type: none"> <li>• <b>1.3.12.D.1</b> Synthesize the elements of art and principles of design in an original portfolio of two- and three-dimensional artworks that reflects personal style and a high degree of technical proficiency and expressivity.</li> <li>• <b>1.3.12.D.2</b> Produce an original body of artwork in one or more art mediums that demonstrates mastery of visual literacy, methods, techniques, and cultural understanding.</li> <li>• <b>9.1.12.A.1</b> Apply critical thinking and problem-solving strategies during structured learning experiences.</li> <li>• <b>9.3.12.C.3</b> Develop personal interests and activities that support declared career goals and plans.</li> <li>• <b>9.3.12.C.5</b> Identify transferable skills in career choices and design alternative career plans based on those skills.</li> </ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Scanner</li> <li>• Adobe Illustrator</li> <li>• Adobe Photoshop</li> </ul>
<b>Notes</b>	