

Design and Color I

Level: 2

Career Cluster: Media Arts

Program: Design and Digital Arts

Pathway: Graphic Design

Aligns with: MGD 1009 Design and Color I

Course Catalog Description

Introduces students to the principles of digital design and color theory as they develop visual communication skills through creative problem-solving, composition, and digital design applications for screen-based media.

Summary

Develops students' ability to apply the digital design process and creative problem-solving through the study of design fundamentals and color theory. Students explore visual communication, composition, and image development while learning how line, form, space, and color relationships influence meaning, audience perception, and design effectiveness in screen-based contexts. The course emphasizes both conceptual development and technical execution as students use digital tools and professional workflows to create, refine, and present design solutions. Through research, critique, and iterative design practices, students build foundational skills in visual communication, color systems, and digital production that prepare them for advanced coursework and careers in graphic design, digital media, and related creative industries.

Notes

The updated course reflects a significant shift from a traditional design fundamentals course to a more comprehensive, digitally integrated and industry-aligned program. The original course primarily focused on foundational design principles and basic color theory with an emphasis on traditional composition and introductory skill development. In contrast, the revised course expands these foundations into clearly structured learning strands that integrate digital workflows, visual communication theory, design history, and contemporary industry practices such as UI, branding, and screen-based media. Additionally, the new version places greater emphasis on research, iterative design processes, critique, and professional studio practices, while incorporating portfolio development, leadership, work-based learning, and a formal final assessment project. These updates strengthen alignment with current CTE expectations by emphasizing real-world application, digital production environments, and preparation for advanced study and careers in graphic design and digital media.

Student Learning Outcomes

1. Career Exploration and Postsecondary Opportunities

Objective: *Students will explore and analyze career pathways related to digital graphic design by examining professional roles, digital tools, work environments, ethical and legal expectations, certifications, professional organizations, and Colorado postsecondary education options to make informed academic and career decisions.*

- 1) Identify employment opportunities in various fields with a focus in the area of digital graphic design.
 - a. Recognize the work typically performed, tools and technology used, and nature of work environments
 - b. Identify potential certifications within the careers
 - c. Find membership organizations associated with the careers
 - d. Understand the necessary education associated within the careers
- 2) Define professionalism within the context of digital graphic design.
 - a. Criticism and evaluation
 - b. Presentation
 - c. Assessment
- 3) Recognize laws, regulations, and ethics significant to the field of digital graphic design, including copyright, licensing, attribution, and responsible media use.
- 4) Identify postsecondary opportunities offered in the state of Colorado
 - a. Technical college, community college, 4-year institutions
 - b. Certificates, associates, bachelor, and advanced degree opportunities

2. Design History, Terminology and Industry Context

Objective: *Students will analyze the evolution and role of digital design within visual communication by examining historical and contemporary styles, terminology, trends, and professional digital design contexts to understand how design influences communication and culture in screen-based media.*

- 5) Identify major historical and contemporary digital design styles, movements, and platforms influencing visual communication (e.g., print-to-digital transitions, web, motion, UI).
- 6) Explain the role of digital design in modern visual communication fields such as branding, web design, social media, advertising, and motion graphics.
- 7) Define and use foundational digital design terminology accurately, including file types, resolution, raster vs. vector, and color modes.
- 8) Compare historical and contemporary design trends with emphasis on digital tools, workflows, and audience engagement.
- 9) Analyze how cultural, technological, and social forces—including software evolution, AI tools, and digital platforms—shape modern design practices.
- 10) Predict emerging digital design trends based on current industry tools, platforms, and user behaviors.

3. Design Communication Theory and Visual Meaning

Objective: *Students will analyze how digital design communicates meaning by applying visual communication theory to natural, cultural, developed, and implied outcomes in screen-based and interactive media.*

- 11) Differentiate between natural, cultural, developed, and implied visual communication in digital imagery and layouts.
- 12) Analyze how digital design communicates mood, emotion, and message through color, imagery, typography, and composition.
- 13) Apply digital visual communication strategies to influence audience perception across platforms (web, social, screen, animation).
- 14) Evaluate the effectiveness of design choices in conveying intended meaning and usability in digital contexts.
- 15) Justify visual decisions based on communication goals, audience needs, and platform requirements.

4. Design Fundamentals, Composition and Image Development

Objective: *Students will apply digital design fundamentals to create effective screen-based compositions by organizing line, form, space, and visual hierarchy for clarity and impact.*

- 16) Apply design components including line, form, space, and hierarchy using digital design tools.
- 17) Analyze element interactions and visual relationships within digital compositions.
- 18) Differentiate between formal, informal, symmetrical, and asymmetrical balance in screen-based layouts.
- 19) Use image variables such as scale, rhythm, texture, value, and direction to guide viewer interaction.
- 20) Evaluate composition effectiveness based on balance, contrast, hierarchy, and usability in digital formats.
- 21) Refine digital compositions through iteration, critique, and revision.

5. Creative Process, Research and Design Development

Objective: *Students will apply a digital design workflow by researching, generating, developing, and refining visual ideas through structured, technology-supported creative stages.*

- 22) Explain stages of the digital design process and creative workflow.
- 23) Conduct digital visual research using online references, trend analysis, and mood boards.
- 24) Develop conceptual sketches, wireframes, or digital mockups.
- 25) Apply digital strategies and methods to advance ideas into refined designs.
- 26) Troubleshoot creative and technical challenges encountered during digital design development.
- 27) Reflect on creative growth, decision-making, and workflow effectiveness.

6. Measurement, Drafting and Design Specifications

Objective: Students will apply digital measurement and layout specifications to prepare accurate, production-ready designs for screen and print outputs.

- 28) Identify digital measuring systems, artboards, grids, rulers, and alignment tools.
- 29) Apply layout and drafting procedures using digital software.
- 30) Use specifications accurately including resolution, aspect ratio, margins, and bleed settings.
- 31) Evaluate precision and accuracy in digital layouts and exported files.
- 32) Revise designs to meet technical and project-based requirements.

7. Tools, Media and Design Execution

Objective: Students will execute digital design concepts using appropriate software tools, media formats, and workflows that support visual intent and professional craftsmanship.

- 33) Identify and use digital design tools effectively (e.g., illustration, layout, image-editing software).
- 34) Apply digital media formats appropriately for various design tasks and outputs.
- 35) Demonstrate professional digital studio procedures including file management and layer organization.
- 36) Analyze how digital tool and media choices affect visual outcomes.
- 37) Troubleshoot software, file, and export issues during digital execution.
- 38) Evaluate finished digital work for quality, consistency, and intent.

8. Color Theory, Science and Visual Perception

Objective: Students will analyze and apply digital color theory principles by understanding color science, perception, psychology, and light interaction to create intentional visual communication.

- 39) Explain the science of digital color, including light spectrum and additive/subtractive systems.
- 40) Differentiate RGB, CMYK, PMS, and process vs. spot color within digital workflows.
- 41) Analyze how color perception is influenced by screens, lighting, environment, and context.
- 42) Apply color digitally to communicate mood, emotion, and emphasis.
- 43) Evaluate color decisions based on visual perception, platform, and output requirements.

9. Color Systems, Mixing and Relationships

Objective: Students will apply structured digital color systems to organize, adjust, and manipulate color relationships for consistent and purposeful design outcomes.

- 44) Identify color wheel positions and relationships within digital palettes.
- 45) Apply digital concepts of hue, value, chroma, tint, tone, and shade.

- 46) Compare color systems including Munsell, Ostwald, RGB, and CMYK in digital contexts.
- 47) Adjust and mix color digitally using software tools and settings.
- 48) Evaluate color harmony, contrast, and accessibility within digital designs.

10. Design Development, Execution and Presentation

Objective: *Students will develop and present completed digital design projects by applying structured production stages from concept to final output.*

- 49) Apply digital project specifications to guide design development.
- 50) Develop layouts through multiple digital design stages.
- 51) Execute finished designs using appropriate digital processes and export methods.
- 52) Present digital work clearly with explanation of intent, process, and technical choices.
- 53) Analyze final outcomes for effectiveness, usability, and improvement opportunities.

11. Critique, Analysis and Professional Studio Practice

Objective: *Students will evaluate digital design work using critique methods while modeling professional digital studio behaviors in preparation for advanced design coursework.*

- 54) Analyze digital design content and execution using critique frameworks.
- 55) Evaluate peer and personal work constructively using digital design criteria.
- 56) Use discipline-specific digital design vocabulary in discussion and written analysis.
- 57) Demonstrate professional digital studio preparation, communication, collaboration, and file management.
- 58) Reflect on feedback and data-driven insights to improve future digital design work

12. Portfolio Development

Objective: *Students will develop and curate a digital design portfolio by selecting, organizing, revising, and presenting work samples that demonstrate technical growth, creative problem-solving, and readiness for advanced study or career opportunities.*

- 59) Select representative design work that demonstrates growth in design principles, color application, and digital execution.
- 60) Organize portfolio content for clarity, visual consistency, and audience accessibility.
- 61) Write brief reflections or rationales that explain project goals, process, and design decisions.
- 62) Revise portfolio pieces based on critique, feedback, and self-assessment.
- 63) Present portfolio work professionally to demonstrate preparedness for future coursework, competitions, or career exploration.

13. Leadership

Objective: *Students will demonstrate leadership in digital design settings by communicating effectively, collaborating responsibly, managing tasks, and contributing positively to classroom, team, and CTSO-based projects.*

- 64) Demonstrate responsible participation, initiative, and accountability in individual and collaborative design work.
- 65) Use effective communication and collaboration strategies when planning, creating, and revising design projects.
- 66) Apply time management and organizational skills to meet project deadlines and shared responsibilities.
- 67) Model ethical, respectful, and inclusive behavior in critique, teamwork, and professional interactions.
- 68) Participate in leadership opportunities through classroom roles, presentations, service, or CTSO experiences.

14. Work-Based Learning

Objective: *Students will connect classroom learning to workplace expectations by exploring work-based learning experiences, applying professional behaviors, and demonstrating readiness for authentic design tasks and industry engagement.*

- 69) Identify work-based learning opportunities related to graphic design, digital media, and creative industries.
- 70) Demonstrate workplace behaviors such as punctuality, dependability, communication, and professionalism during authentic experiences.
- 71) Apply classroom design skills to client-based, community-connected, or industry-informed projects.
- 72) Reflect on feedback from teachers, peers, or industry partners to improve work quality and professional readiness.
- 73) Document work-based learning experiences, responsibilities, and skill development as evidence of career preparation.

15. Final Project Assessment

Objective: *Students will synthesize course learning in a final design project by planning, producing, presenting, and evaluating a complete visual communication product that demonstrates mastery of foundational design and color concepts.*

- 74) Develop a final design project that responds to a defined prompt, audience, purpose, or communication goal.
- 75) Apply course concepts including design principles, composition, color relationships, and digital workflow in the final product.
- 76) Present and justify final project decisions using appropriate design vocabulary and evidence from the creative process.
- 77) Evaluate the final project using criteria such as creativity, technical quality, communication effectiveness, and revision process.

16. Career and Technical Student Organizations

Objective: *Using the [CTSO Resource Document](#), chapter activities will provide some of the best opportunities CTSO members will have to learn by doing. A successful [program of work](#) creates a positive learning atmosphere in the classroom. CTSO members learn*

how to accept responsibility, work as a team, manage a budget, and handle success and failure. Per the CTE Admin Handbook, CTSOs are embedded into curriculum.

Professional Development

Prepare each member for entry into the workforce and provide a foundation for success in a career. Becoming a professional does not stop with acquiring a skill, but involves an increased awareness of the meaning of good citizenship and the importance of labor and management in the world of work.

Community Service

Promote and improve goodwill and understanding among all segments of the community through services donated by CTSO chapters, and to instill in its members a lifetime commitment to community service.

Business & Industry Connections

Increase awareness of quality job practices and attitudes, and increase the opportunities for employer engagement and eventual employment.

Financial Leadership

Plan and participate in activities to allow all members to carry out the chapter's projects. Educate members on their own personal finance for current and future success.

Public Relations

Make the general public aware of the good work that students in career and technical education are doing to better themselves and their community, state, nation, and world.

Social Activities

To increase cooperation in the school and community through activities that allow CTSO members to get to know each other in something other than a business or classroom setting.

Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc)
[CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Note: Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.

Reading, Writing and Communicating Crosswalk

Course: Design and Color I

Colorado Academic Standards – Reading, Writing and Communicating

Standard	Prepared Graduate Competency	Description	Course Evidence / Alignment
Standard 1: Oral Expression and Listening	Prepared Graduate 1 – Collaboration	Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.	Students engage in advanced critique sessions, collaborate on complex design problems, listen to feedback, and contribute ideas to refine color and design solutions.
Standard 1: Oral Expression and Listening	Prepared Graduate 2 – Oral Presentations	Deliver effective oral presentations for varied audiences and varied purposes.	Students present and justify design concepts, color strategies, and layout decisions for specific audiences and purposes.
Standard 2: Reading for All Purposes	Prepared Graduate 4 – Informational Texts	Read a wide range of informational texts to build knowledge and to better understand the human experience.	Students read and interpret advanced informational texts related to color theory, design systems, branding standards, and visual communication

			principles.
Standard 2: Reading for All Purposes	Prepared Graduate 5 – Language in Context	Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.	Students apply precise design and color theory vocabulary and adapt communication for professional, creative, and client-focused contexts.
Standard 3: Writing and Composition	Prepared Graduate 7 – Informational Writing	Craft informational/explanatory texts using techniques specific to the genre.	Students write detailed design rationales, critiques, reflections, and documentation explaining color theory application and visual choices.
Standard 3: Writing and Composition	Prepared Graduate 9 – Writing Process	Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.	Students revise and refine written and visual work to produce polished, professional-quality design products.
Standard 4: Research Inquiry and Design	Prepared Graduate 10 – Research & Ethics	Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.	Students research color systems, trends, and design references; evaluate sources; and apply ethical practices including copyright and attribution.

Free Resource Links

1. Career Exploration and Postsecondary Opportunities

- ONET Online (career profiles, design skills, job outlook)
<https://www.onetonline.org/>
- My Next Move (career exploration, graphic design roles)
<https://www.mynextmove.org/>
- College Board BigFuture (postsecondary programs, majors, careers)
<https://bigfuture.collegeboard.org/>

2. Design History, Terminology and Industry Context

- Smashing Magazine (design trends, terminology, industry insights)
<https://www.smashingmagazine.com/>
- AIGA Eye on Design (design history, contemporary practice)
<https://eyeondesign.aiga.org/>
- Creative Bloq (design trends, digital tools, inspiration)
<https://www.creativebloq.com/>
- Interaction Design Foundation (design theory, terminology, UI/UX)
<https://www.interaction-design.org/>

3. Design Communication Theory and Visual Meaning

- Canva Design School (visual communication, layout, messaging)
<https://www.canva.com/learn/design/>
- The Noun Project (visual symbols, meaning, icon communication)
<https://thenounproject.com/>
- Adobe Creative Cloud Tutorials (visual storytelling, communication)
<https://creativecloud.adobe.com/learn>
- Interaction Design Foundation (visual communication theory, perception)
<https://www.interaction-design.org/literature>

4. Design Fundamentals, Composition and Image Development

- Ctrl+Paint (composition, line, form, digital drawing fundamentals)
<https://www.ctrlpaint.com/library>
- Drawspace (design fundamentals, composition techniques)
<https://www.drawspace.com/>
- Canva Design Basics (layout, hierarchy, composition)
<https://www.canva.com/learn/design-basics/>
- Envato Tuts+ Design (composition, layout, visual hierarchy)
<https://design.tutsplus.com/>

5. Creative Process, Research and Design Development

- Milanote (mood boards, creative workflow, ideation)
<https://milanote.com/>

- Pinterest (visual research, inspiration, mood board creation)
<https://www.pinterest.com/>
- Behance (creative research, project exploration, inspiration)
<https://www.behance.net/>
- Google Arts & Culture (visual research, design inspiration)
<https://artsandculture.google.com/>

6. Measurement, Drafting and Design Specifications

- Canva Size Guide (dimensions, layout specs, design sizing)
<https://www.canva.com/sizes/>
- Adobe Print Design Resources (resolution, bleed, print specs)
<https://helpx.adobe.com/>
- UXPin Layout Guide (grid systems, layout precision)
<https://www.uxpin.com/studio/blog/>
- Interaction Design Foundation Layout Articles (grid systems, spacing, usability)
<https://www.interaction-design.org/literature/topics/layout>

7. Tools, Media and Design Execution

- Canva (design tools, layout, digital media creation)
<https://www.canva.com/>
- Krita (digital illustration, design execution)
<https://krita.org/>
- GIMP (image editing, design tools)
<https://www.gimp.org/>
- Adobe Creative Cloud Learn (professional tools, workflows)
<https://creativecloud.adobe.com/learn>

8. Color Theory, Science and Visual Perception

- Adobe Color (color theory, palettes, harmony tools)
<https://color.adobe.com/>
- Coolors (color palette generator, theory application)
<https://coolors.co/>
- Color Matters (color psychology, perception, science)
<https://www.colormatters.com/>
- Canva Color Wheel (color relationships, schemes)
<https://www.canva.com/colors/color-wheel/>

9. Color Systems, Mixing and Relationships

- Adobe Color Wheel (color relationships, harmony systems)
<https://color.adobe.com/create/color-wheel>
- Pantone (color systems, PMS standards, color matching)
<https://www.pantone.com/>
- Sessions College Color Theory (color systems, mixing concepts)
<https://www.sessions.edu/color-calculator/>

- W3Schools Colors (RGB, HEX, color systems basics)
<https://www.w3schools.com/colors/>

10. Design Development, Execution and Presentation

- Canva Presentation Tools (design presentation, layout, export)
<https://www.canva.com/presentations/>
- Google Slides (presentation design, sharing, collaboration)
<https://slides.google.com/>
- Prezi (visual presentation, storytelling, design communication)
<https://prezi.com/>
- Adobe Express (presentation graphics, visual storytelling)
<https://www.adobe.com/express/>

11. Critique, Analysis and Professional Studio Practice

- AIGA Resources (design critique, professional practice)
<https://www.aiga.org/resources>
- Behance (peer critique, project feedback, portfolio review)
<https://www.behance.net/>
- Dribbble (design feedback, professional sharing)
<https://dribbble.com/>
- Interaction Design Foundation (critique methods, usability analysis)
<https://www.interaction-design.org/>

12. Portfolio Development

- Adobe Portfolio (professional portfolios, showcasing design work)
<https://portfolio.adobe.com/>
- Behance (design portfolios, creative projects, industry examples)
<https://www.behance.net/>
- Dribbble (creative portfolios, branding and layout inspiration)
<https://dribbble.com/>
- Canva Presentation Templates (portfolio presentation, visual organization)
<https://www.canva.com/presentations/templates/>

13. Leadership

- MindTools – Leadership Skills (communication, teamwork, decision-making)
https://www.mindtools.com/pages/main/newMN_LDR.htm
- SkillsYouNeed – Leadership (collaboration, conflict resolution, professionalism)
<https://www.skillsyouneed.com/lead/>
- TED Talks – Leadership (communication, influence, leadership growth)
<https://www.ted.com/topics/leadership>
- Indeed Career Guide – Leadership Skills (initiative, teamwork, workplace readiness)
<https://www.indeed.com/career-advice/career-development/leadership-skills>

14. Work-Based Learning

- CareerOneStop – Work-Based Learning (internships, apprenticeships, career exploration)
<https://www.careeronestop.org/ExploreCareers/learn/work-based-learning.aspx>
- Colorado Work-Based Learning (state guidance, employer connections)
<https://cdle.colorado.gov/work-based-learning>
- ACTE Work-Based Learning Resources (career readiness, employability skills)
<https://www.acteonline.org/professional-development/work-based-learning/>
- AIGA Resources (design careers, professional expectations, networking)
<https://www.aiga.org/resources>

15. Final Project Assessment

- PBS LearningMedia – Media Production Projects (project ideas, assessment, rubrics)
<https://www.pbslearningmedia.org/>
- Adobe Creative Cloud Tutorials (design projects, workflows, execution)
<https://creativecloud.adobe.com/learn>
- Canva Design School (design projects, layout, presentation)
<https://www.canva.com/designschool/>
- Rubistar (project rubrics, assessment tools)
<https://www.rcampus.com/rubistar/>



Technology Student Association – National Competitive Events

Promotional Design

Objective: Students will design, produce, document, and present promotional materials that meet TSA Promotional Design requirements for branding, visual communication, production quality, and portfolio documentation.

- Research the annual TSA Promotional Design theme, target audience, required products, and branding expectations.
- Develop a consistent visual identity using line, form, composition, color theory, typography, imagery, and design principles.
- Create required promotional items that communicate a clear theme, message, and purpose.
- Apply color systems, color psychology, contrast, harmony, and visual hierarchy to strengthen the promotional message.
- Document the design process through sketches, drafts, revisions, production notes, references, and required portfolio materials.
- Prepare final promotional products for submission or display according to TSA event procedures.
- Evaluate the final entry using TSA criteria for creativity, consistency, production quality, communication, and theme alignment.

Resources

- Technology Student Association – Promotional Design competition guidelines
<https://tsaweb.org/competitions-programs/tsa/themes-problems>
- Adobe Express – Promotional graphics and design tools
<https://www.adobe.com/express/>
- Canva – Branding, layouts, and promotional design templates
<https://www.canva.com/>
- Adobe Illustrator – Vector design and production graphics
<https://www.adobe.com/products/illustrator.html>



Technology Student Association – National Competitive Events

Board Game Design

Objective: *Students will design, prototype, document, and present an original board game that meets TSA Board Game Design requirements for theme, gameplay, visual design, rules, prototype quality, and presentation.*

- Research the annual TSA Board Game Design theme and develop an original game concept.
- Design the game board, cards, tokens, packaging, instructions, and visual assets using consistent graphic design principles.
- Apply color theory, composition, balance, contrast, rhythm, hierarchy, and visual continuity to the game components.
- Develop game rules, objectives, player actions, scoring, and win conditions that support clear gameplay.
- Create a playable prototype that demonstrates the game concept, components, and theme connection.
- Test the game with users and revise the visual design, instructions, components, and gameplay based on feedback.
- Present the board game to judges and explain the visual design, gameplay decisions, design process, and response to the annual theme.

Resources

- Technology Student Association – Board Game Design competition guidelines
<https://tsaweb.org/competitions-programs/tsa/themes-problems>
- Adobe Illustrator – Vector artwork, layout, and game component design
<https://www.adobe.com/products/illustrator.html>
- BoardGameGeek – Board game design examples and references
<https://boardgamegeek.com/>
- The Game Crafter – Board game prototyping resources
<https://www.thegamecrafter.com/>



Technology Student Association – National Competitive Events

Children's Stories

Objective: Students will write, illustrate, design, document, and present an original children's story that communicates a STEM concept in alignment with TSA Children's Stories competition requirements.

- Research the annual TSA Children's Stories theme and identify an age-appropriate STEM concept for the story.
- Develop a story concept with characters, setting, plot, vocabulary, and message appropriate for the target audience.
- Create original illustrations using line, form, color, composition, balance, contrast, rhythm, and visual continuity.
- Lay out story pages so that text and illustrations work together clearly and professionally.
- Revise the storybook based on feedback related to clarity, age appropriateness, visual design, and theme connection.
- Document the writing, illustration, design, revision, and production process.
- Present the story to judges and explain the theme connection, design choices, audience decisions, and educational purpose.

Resources

- Technology Student Association – Children's Stories competition guidelines
<https://tsaweb.org/competitions-programs/tsa/themes-problems>
- Adobe Illustrator – Illustration, page layout, and vector artwork
<https://www.adobe.com/products/illustrator.html>
- Adobe InDesign – Book layout and page design tools
<https://www.adobe.com/products/indesign.html>
- ReadWriteThink – Story mapping and writing resources
<https://www.readwritethink.org/>