Escondido Union High School District

Printing & Graphics 1

EUHSD Board Approval Date: 2/14/17
The EUHSD Printing & Graphics 1 curriculum document identifies what students should be able to know by grade level in a comprehensive standards-based course of study. The curriculum document is updated annually based on student academic achievement data, research and best practices, and input from stakeholders. The EUHSD curriculum document contains the following documents and/or information:

- A. Course Description
- B. Course Guidelines/Requirements - graduation credit information, transcript information, adopted materials, adopted technology, assessment outline
- C. Instructional Materials References
- D. Scope and Sequence Map with Essential Standards outlined by Unit
- E. References to key essential design and implementation documents

A comprehensive course of study and/or program is designed so that all students have access to the rigorous curriculum necessary to graduate high school demonstrating college and career readiness skills. Student-Centered learning provides opportunity for collaboration, communication, and a robust learning environment and provides opportunities for all students to meet the goals of the district’s Instructional Focus at the time of this writing: “All students communicate their thinking, ideas and understanding by effectively using oral, written and/or non-verbal expression.”

A key design consideration in the transition to the new California State Standards is a focus on changes to pedagogy. The English Language Arts instructional shifts guide classroom teaching and learning and the foundation of curriculum and instructional design. Key considerations of the ELA Instructional shifts can be found by visiting the following URL: http://www.corestandards.org/other-resources/key-shifts-in-english-language-arts/

The curriculum document is aligned to the California Model Career Technical Education Standards and reflects learning outcomes from both the anchor and pathway standards.
Printing & Graphics 1 Course Description

Printing & Graphics 1 is the first of three courses in the CTE pathway, “Manufacturing and Product Development.” It provides entry-level knowledge and practical training in the digital printing/screen printing and graphics industry. The following skills are geared towards the acquisition and development of the basic foundational skills necessary to go into the second year of the program.

Instruction covers the following: An overview of graphic communications, exploring the history and theory of mass communication, communication models including: safety, graphic design process (research, thumbnails, rough drafts, proofs, and final product), desktop/electronic publishing, digital printing, camera, screen preparation, screen printing, binding and finishing and work place skills. Students operate equipment, which includes the practical art of using computer page layout and illustration programs, and the fine art of creating their own work through the computer (illustration or photo applications) or by hand, and incorporating it with other media, printing to .pdf, digital press, and/or video and the web. Students will learn perception through the Gestalt principles of design. Students will learn and understand how to establish a clear visual message using Adobe Creative Suite as well as customer service skills (written and verbal), and print shop operations. Approximately 180 hours are needed to complete the course.

Course Requirements

<table>
<thead>
<tr>
<th>Course Length: Year Long</th>
<th>Grade Level: 9-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC/CSU Requirement:</td>
<td>Meets UC/CSU Requirement as a “g” CTE Elective</td>
</tr>
<tr>
<td>Course Number (Semester A): 5079</td>
<td>Transcript Abbreviation (Semester A): PRNT &amp; GRPHCS 1 A P</td>
</tr>
<tr>
<td>Course Number (Semester B): 5080</td>
<td>Transcript Abbreviation (Semester B): PRNT &amp; GRPHCS 1 B P</td>
</tr>
<tr>
<td>Credits (Semester A): 5 Elective or CTE</td>
<td>Credits (Semester B): 5 Elective or CTE</td>
</tr>
<tr>
<td>Required Prerequisite(s):</td>
<td>Recommended Prerequisite(s): None</td>
</tr>
<tr>
<td>Industry Sector: Manufacturing and Product Development</td>
<td>Career Pathway: Graphic Production Technologies</td>
</tr>
<tr>
<td>Board Approval Date (Curriculum): 2/14/17</td>
<td>Board Approval Date (Materials):</td>
</tr>
</tbody>
</table>

Core Instructional Material(s):
- Graphic Communications, the Printed Image, by Z.Z. Prust

Supplemental Instructional Material(s):
- Graphic Design Basics, by Amy E. Arntson
- The Non-Designer’s Design & Type Books, by Robin Williams
- http://www.adobe.com
- https://canvas.instructure.com
- CALJOBS
Technology Resource/s: Teachers will utilize a variety of equipment in the work/lab space.

- Apple computers
- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com) - for graphic design information
- [http://www.adobe.com](http://www.adobe.com) - for curriculum, assignments, and helps
- [https://canvas.instructure.com](https://canvas.instructure.com) - for student portfolio (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT) - a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership

Assessment/s: The course is designed as a project based curriculum. Each unit outlines specific skills and/or long term projects which serve as unit and course assessments.

- Teachers create day-to-day formative assessments that guide instructional decision-making and designed to demonstrate student proficiency. These may be implemented by checking off competencies.
- End of Chapter tests on content textbook: Overview of Graphic Communications.
- Successful completion of Safety Test at 100 %
- Completion of projects (both individual and group)
- Semester final exam as a summative assessment, evaluating curriculum competency and ability to construct a project using skills gained.
- Portfolio assessment on content acquisition of design curriculum.
- Reading assessment is based on research projects evaluating graphic design options.
- Writing assessment is based on writing essays to devise solutions to real world issues in the field of graphic design.
- Oral assessment is based on planning, compiling, and presenting work to class as individuals and in groups.
The Scope and Sequence Guide is a California standards based document that delineates the standards based skills students are expected to know and do in order to meet College and Career Readiness expectations. Each unit of study in the Scope and Sequence document is designed to build upon the previous unit and/or prerequisite coursework in support of student mastery of specific standards based skills. The Scope and Sequence document provides the framework of understanding for key assignments, key assessments, and instructional resources and strategies that serve to assist students in meeting unit learning objectives. The document will be updated annually with input from all stakeholders.

In coursework requiring reading and writing, the following standards are not specifically stated in any one unit of study, but are the result of implementation throughout the curriculum as students participate in reading, writing, and speaking/listening standards based activities.

- **By the end of grade 11, students will read and comprehend literary nonfiction in the grades 11-CCR text completely and proficiently, with scaffolding as needed at the high range.** (Reading Informational Text Standard 10)
- **Students will write routinely over extending 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 and purposes.** (Writing Standard 10)
- “To be college and career ready, students must have ample opportunities to take part in a variety of rich and structured conversations – as part of a whole class, in small groups, and with a partner – build around important content in various domains. They must be able to contribute appropriately to conversations, make comparisons and contrasts, and analyze and synthesize a multitude of ideas according to the standards of evidence appropriate to a particular discipline.” (Standards for ELA Anchor Standards for Speaking/Listening)

The following CTE anchor standards are not specifically stated in any one unit of study, but are reflected as skills and practices throughout the curriculum.

- **MPD Anchor 4.0 Technology** Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Manufacturing and Product Development sector workplace environment. (Direct alignment with WS 11-12.6)
- **MPD Anchor 6.0 Health and Safety:** Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Manufacturing and Product Development sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)
- **MPD Anchor 10.0 Technical Knowledge and Skills:** Apply essential technical knowledge and skills common to all pathways in the Manufacturing and Product Development sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6)
- **MPD Anchor 11.0 Demonstration and Application:** Demonstrate and apply the knowledge and skills contained in the Manufacturing and Product Development anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through the Skills USA career technical student organizations.
# Printing & Graphics 1 Scope and Sequence

## Unit 1 – Overview of Graphic Communications, Health, and Safety

### Unit Description:
This unit is an overview of graphic communications. It consists of two chapters: 1) Overview of Graphic Communications; 2) Safety and Health. Upon the completion of the assignments in Chapters 1 - 2, students will be able to explain the important role of graphic communications in our technological society today, including the major processes, classification, and opportunity for future employment. Students will have a complete understanding of safety in the classroom and the print shop including: 1) read and understand MSDS paperwork; 2) general housekeeping; 3) operation of equipment. In addition, the student will have read, understood, and signed all appropriate user agreements and passed a general safety test with the score of 100%.

Students will begin to develop graphic design skills using Adobe Illustrator and Adobe Photoshop incorporating elements of design as the create projects as individuals and in groups. Students will discover types of measuring for paper, differentiate between different paper weights and their uses, and types and sizes of envelopes. Students will explore paper brightness, different image resolutions, proportional scaling, and digital files. Students will access and use the online classroom of Instructure by Canvas to acquire assignments, assessments, and for written communications. Students will communicate both orally and in writing to demonstrate a clear understanding of concepts taught utilizing key printing and graphics vocabulary.

Students will discover opportunities in the ever-growing field of printing through study and practicing new skills, synthesizing information by designing professional products, and sharing both individually and as a part of a team.

### Unit Standards:

#### Anchor Standards Manufacturing and Product Development

**Knowledge and Performance Anchor Standards:**

<table>
<thead>
<tr>
<th>2.0 Communication Anchor Standards</th>
<th>(Used throughout all units of study)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 Acquire and accurately use Manufacturing and Product Design sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.</td>
<td></td>
</tr>
</tbody>
</table>

| 4.0 Technology | Use existing and emerging technology to investigate, research, and produce products and services, including new information as required in the Manufacturing and Product Design sector workplace environment. |

| 6.0 Health and Safety | (Used throughout all units of study) Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Manufacturing and Product Design sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4) |

| 6.1 Locate, and adhere to, Material Safety Data Sheet (MSDS) |

### Learning Objectives:

**Students will be able to:**

- Explore and explain the important role of graphic communications in our technological society.
- Identify the major processes commonly associated with the graphic communications industry.
- Summarize the four printing classifications.
- Recite the segments of the printing industry.
- Understand the purpose of health and safety in the print environment.
- Understand and explain the safe handling of materials and their storage.
- Distinguish between the different printing & graphic materials and their respective proper uses.
- Explain the safety methods for fire protection.

### Unit Assignments:

- In unit 1, students will learn all of the safety features of all of the equipment. Students will demonstrate the safety features by participating in a Safety Test where they’ll need to perform to 100% accuracy. Students will read all related materials for each piece of equipment, put essential learnings into their notebook, and share the key safety features with others in class discussions, including information on MSDS sheets and what is acceptable in the shop area. Communication will include potential hazards and how to respond. Students will participate in a tour of both the lab (computers) and the shop (heavy equipment and chemicals). Instructor will summarize important information regarding classroom and shop safety.
- The primary learning within the course is offered via the Canvas Learning Management System (LMS). Students will learn about Canvas by participating in a variety of teacher led tasks (online classroom and testing & assessment environment). Students will practice using his/her district email and communicate with instructor using Canvas (LMS). Since this online classroom

### Unit Assessments:

- Safety Test – 100% accuracy
- Set Up Canvas Account and complete series of demonstration lessons
- Formative competency assessments covering beginning Adobe Creative Suite applications: Illustrator, Photoshop, and InDesign throughout the unit of study
- Written Summary of Chapter 1-2 from core text (at least 2 pages in length)

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6
6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.

6.5 Practice personal safety when lifting, bending, or moving equipment and supplies.

6.6 Demonstrate how to prevent and respond to work-related accidents or injuries and emergencies.

6.7 Maintain a safe and healthful working environment.

7.0 Responsibility and Flexibility - (Used throughout all units of study)

7.2 Explain the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.

10.0 Technical Knowledge and Skills - (Used throughout all units of study)

Apply essential technical knowledge and skills common to all pathways in the Manufacturing and Product Design sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6)

10.1 Interpret and explain terminology and practices specific to the Manufacturing and Product Design sector.

11.0 Demonstration and Application - (Used throughout all units of study)

Demonstrate and apply the knowledge and skills contained in the Manufacturing and Product Design anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through the Skills USA career technical student organizations.

11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Manufacturing and Product Design sector program of study.

Pathway Standards: Manufacturing and Product Development:

- A1.0 Apply the basic graphic design principles to achieve effective visual communication.

- A3.0 Apply graphic design software and desktop publishing as a means of creating effective communication.

- Understand different kinds of measurements (paper, weights, picas, inches.)

- Integrate proportional scaling in an application such as Photoshop.

- Create a simple graphic (such as a logo) in Adobe Illustrator.

- Construct a photomontage using two or more photos.

holds curriculum, assessments, and is the means by which assignments are turned in, students will comply with online classroom rules and experiment with assessments, assignments, and navigation prior to having “real” assignment and assessments to turn in.

- Read, discuss, and answer questions for Chapter 1 and 2 in Graphic Communications, the Printed Image. Students will be able to define and describe an overview of graphic communications in the world today. Students will submit a one-page summary of their Chapter 1 and 2 notes as part of their assignment.

- Students will complete a career exploration task using the WWW and other resources. Students will explore career opportunities in the area of graphic design. Students will research and discover what job possibilities exist in the area of printing and graphics. They will compare job skills and paychecks in order to analyze what concentration they would like to pursue. Students will continue to explore this area throughout the course and will have to create a job resume and cover letter as a culminating activity. Students will add information from the career exploration task to their notes and keep throughout the course.

- Throughout the course students will interact with a variety of digital software and applications. They will learn to navigate Adobe Creative Suite. Students will understand the commands common to all Adobe Creative Suite applications. They will demonstrate their learning through a series of teacher assigned tasks and will perform these through a series of assigned tasks.

- “A taste” of Illustrator. Students will practice using the first tools in creating line art, and how line art can communicate a message. “A taste” of Photoshop. Students will practice using the first tools in importing a photo and touching up flaws. Students will compare the differences between line
- A14.0 Identify the different industries that utilize graphic design and identify other potential business opportunities for graphic design applications.

**CTE ELA Standards:**
- 11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- 11-12.3 Write narratives to develop real or imaged experiences or events using effective technique, well-chosen details, and well-constructed event sequences.

**Meeting the Needs of ELs:**
- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards:
- In 2014, the CA Department of Education adopted new ELA-ELD Framework, with specific strategies designed to meet the needs of EL students. Visit the following URL to learn more about the new frameworks:

**Instructional Resources:**
- Graphic Communications, the Printed Image, by Z.Z. Prust,
- Graphic Design Basics, by Amy E. Arntson
- The Non-Designer’s Design & Type Books, by Robin Williams
- [http://www.adobe.com](http://www.adobe.com)
- [https://canvas.instructure.com](https://canvas.instructure.com)
- Apple computers
- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com)
- [http://www.adobe.com](http://www.adobe.com) - for graphic design information
- [https://canvas.instructure.com](https://canvas.instructure.com) - for curriculum, assignments, and helps
- [https://jquery.com](https://jquery.com) - student portfolios (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT) - a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership

Students will develop the ability to use InDesign as a page layout tool. Students will experiment with importing both line art and photos. Students will learn how to produce text blocks and enhance a document using other elements of design (artwork.). In order to assess mastery of the use of InDesign, students will compose a one-paragraph essay on a research topic in the field of print and graphics, enhancing the paragraph through the use of appropriately placed line art, and including a photograph that builds upon the points articulated in the essay. They will submit their research topic to the teacher.
Printing & Graphics 1 Scope and Sequence
Unit 2 – Measurement and Typography

Unit Description: This unit is an introduction to measurement within the field of graphic design, including but not limited to the common type sizes and units used in typography. It consists of two chapters and computer applications respectively: 1) Measurement; 2) Typography 3) projects to be constructed in the Adobe Creative Suite applications. Upon the completion of the assignments in Chapters 3 - 4, students will have knowledge and understanding of the point system type measurement and be able to apply it to a variety of events as assigned by the instructor. Students will understand the standard grades of paper and basic paper sizes. They will also be able to place visual images using desktop publishing software. Using proportional scales, students will be able to reduce and enlarge images and have a good understanding of the role typography plays in visual communication.

Unit Standards:

<table>
<thead>
<tr>
<th>Anchor Standards Manufacturing and Product Development Knowledge and Performance Anchor Standards:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.0 Communication Anchor Standards</strong> - (Used throughout all units of study)</td>
</tr>
<tr>
<td>• 2.0 Acquire and accurately use Manufacturing and Product Design sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.</td>
</tr>
<tr>
<td>• 2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.</td>
</tr>
<tr>
<td><strong>4.0 Technology Anchor Standards</strong> - (Used throughout all units of study.)</td>
</tr>
<tr>
<td><strong>4.0 Technology</strong> - Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Manufacturing and Product Design sector workplace environment. (Direct alignment with WS 11-12.6)</td>
</tr>
<tr>
<td>• 4.1 Use electronic reference materials to gather information and produce products and services.</td>
</tr>
<tr>
<td>• 7.5 Apply high-quality techniques to product or presentation design and development.</td>
</tr>
<tr>
<td><strong>5.0 Problem Solving and Critical Thinking</strong> - (Used throughout all units of study.)</td>
</tr>
<tr>
<td>• 5.1 Identify and ask significant questions that clarify various points of view to solve problems.</td>
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<tr>
<td><strong>6.0 Health and Safety</strong> -</td>
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<tr>
<td>• 6.3 Use health and safety practice for storing, cleaning and maintaining tools, equipment, and supplies.</td>
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<tr>
<td><strong>7.0 Responsibility and Flexibility</strong> - (Used throughout all units of study.)</td>
</tr>
</tbody>
</table>

Learning Objectives:

Students will be able to…

- Explain the point system of type measurement.
- Identify standard grades of paper and basic paper sizes.
- Understand the use of proportional scales.
- Summarize the development of type styles.
- Identify the basic terms used to describe type.
- Summarize seven typeface classifications.
- Explain the difference between a family, a series, and a font of type.
- Identify the common type sized and units used in typography.
- Evaluate the factors that contribute to the legibility of type.
- Analyze how a graphic should be positioned within the cropping window in order to crop a photo at its best position prior to placing within a document.
- Differentiate between cropping an object and scaling an object.
- Build a new font using shapes.

Unit Assignments:

- Students will read Chapter 3 in Graphic Communications, the Printed Image (parts relative to measurement, paper weights, and proportional scaling.) They will demonstrate their understanding by responding to a series of chapter related reading questions. Students will identify the different paperweights used in Print and Graphics communication. Their discussion will compare the various reasons for paper and card stock choices. The teacher will create day-to-day formative assessments that guide instructional decision-making covering proportional scaling, cropping, paper weights, and information about typography.
- Students will learn about the point system for measuring type and apply that knowledge in creating a document and choosing font sizes as directed by instructor. They will complete various exercises on typography and typefaces.
- Students will read Chapter 4 in Graphic Communications, the Printed Image and answer questions about typefaces, characters, points, and picas. Students will practice use of typographic terminology in classroom discussion. Students will distinguish appropriate fonts for different business purposes. Students will explore the utilization of multiple fonts in a single document.

Unit Assessments:

- Day to Day formative assessments on proportional scaling, cropping, paper weights, and typography
- Formative competency check-off in proportionately scaling pictures using an application from Adobe Creative Suite (included is a comparison between cropping photos and scaling photos)
- Formative competency check-off in use of typefaces, their sizes and placement, and the use of multiple fonts in a single document using an
- 7.4 Practice time management and efficiency to fulfill responsibilities.

**9.0 Leadership and Teamwork** - (Used throughout all units of study.)
- 9.6 Respect individual and cultural differences and recognize the importance of diversity in the workplace.
- 9.7 Participate in interactive teamwork to solve real Manufacturing and Product Design sector issues and problems.

**10.0 Technical Knowledge and Skills** - (Used throughout all units of study.)
- 10.3 Construct projects and products specific to the Manufacturing and Product Design sector requirements and expectations.

**11.0 Demonstration and Application** - (Used throughout all units of study.)
- 11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Manufacturing and Product Design sector program of study.

**Pathway Standards: Manufacturing and Product Development:**
- **Graphic Production Technologies Pathway**
  - A1.3 Create a basic layout applying images, text, and typography.
  - A1.4 Create and choose font styles.
  - A3.0 Apply graphic design software and desktop publishing as a means of creating effective communication.

**CTE ELA Standards:**
- **Anchor Standard 11: Demonstration and Application**
  Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.
- **Geometry – CO – Congruence**
  Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.
- **Crosscutting Concept – CC**
  - 3. Scale, proportion, and quantity.

- Evaluate appropriate fonts for different projects.

- Students will practice the proportional scaling of a photograph as well as targeting a specific area and cropping said area. Students will differentiate between proportional scaling and cropping.
  - Students will compose a document as led by the instructor to contain the following: two-three different fonts, an illustration that is repeated throughout the document, a proportionately scaled photograph, a cropped photograph. All of the above will be designed to deliver a visual communication to a selected audience.

- Summative evaluation in composing and constructing a flyer using multiple fonts, a proportionately scaled photo, and a repetitive element from Adobe Creative Suite.
### Meeting the Needs of ELs:
- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards: [http://www.cde.ca.gov/sp/el/er/documents/eldstndspubli...](http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf)
- In 2014, the CA Department of Education adopted new ELA-ELD Framework, with specific strategies designed to meet the needs of EL students. Visit the following URL to learn more about the new frameworks: [http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf](http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf)

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- Apple computers
- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com)
- [http://www.adobe.com](http://www.adobe.com) - for graphic design information
- [https://canvas.instructure.com](https://canvas.instructure.com) - for curriculum, assignments, and helps
- [https://wordpress.com](https://wordpress.com) - student portfolios (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT) - a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership
Unit 3 is designed to introduce the components included in a career as a Graphic Designer. It is comprised of information given in Chapter 5 of the textbook and individual and group projects. When looking at a printed piece, students will discover the importance of taking appropriate steps in the design and layout phase. Students will study the Gestalt Theory of visual imaging and visual perceptions. Students will acquire the skills to choose unique design elements for projects wherein all of the elements that make up the visual end product work in concert with the core purpose of the business. Students will focus on developing extensive layout and design knowledge as well as researching different businesses to get to the heart of the purpose and function, and thereby become competent in helping them choose their design and business packaging. The visual message sent is all-important. In many cases the visual image must be both artistic and functional for a multiplicity of uses. Techniques developed and utilized are critical in producing a great printed product, whether or not it is digital printed or printed to the Internet.

### Unit Standards

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<td>2.1 Recognize the elements of communication using a sender-receiver model.</td>
</tr>
<tr>
<td>2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.</td>
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<td>2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.</td>
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<td>4.0 Technology Anchor Standards - (Used throughout all units of study.)</td>
<td>4.1 Use electronic reference materials to gather information and produce products and services.</td>
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<td>5.0 Problem Solving and Critical Thinking - (Used throughout all units of study.)</td>
<td>5.1 Identify and ask significant questions that clarify various points of view to solve problems.</td>
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<td>5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.</td>
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<td>6.0 Health and Safety -</td>
<td>6.3 Use health and safety practice for storing, cleaning and maintain tools, equipment, and supplies.</td>
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<td>7.4 Practice time management and efficiency to fulfill responsibilities.</td>
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<td>7.5 Apply high-quality techniques to product or presentation design and development.</td>
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### Learning Objectives:

- Students will be able to...
  - Access information to learn about the role of the graphic designer.
  - Develop understanding of the elements of good graphic design.
  - Define and describe the elements of layout.
  - Explain the factors that determine how a layout & design is developed.
  - Differentiate between the design methods used in layout.
  - Demonstrate knowledge of the methods used in preparing illustrations for layout.
  - Create a one-page layout using good principles of design.
  - Design a two-sided greeting card.

### Unit Assignments:

- Students will independently read Chapter 5 from their core text ~ Design and Layout, and answer chapter questions, and participate in classroom discussions designed to enhance their understanding of the role of the graphic designer, its many facets. This information will be used for the student seek knowledge in the specific area of interest within the field and add this information to their career exploration search.
- Students will complete worksheet called “Fantastic Facts for Level One Introduction to Print & Graphics.” (This is a teacher-produced document.)
- Students will conduct independent and/or group work researching the psychology of visual perception “Gestalt Theory” and discuss in class. Complete the Gestalt Theory paperwork and submit through Canvas by Instructure. They will summarize their findings and cite their sources and submit a bulleted notes summary page to their instructor.
- PROJECT: Create a design package including hand-drawn thumbnail sketches illustrating multiple options, and a rough draft showing the best option. Instructor will provide the information for your

### Unit Assessments:

- Day-to-day formative assessments that guide instructional decision-making regarding acquisition and application of the necessary skills in a design and layout package
- Fantastic facts general summative assessment
- Summative assessment will be done at the end of this chapter through grading the completeness of the package labeled, “PROJECT”
<table>
<thead>
<tr>
<th>9.0 Leadership and Teamwork - (Used throughout all units of study.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.5</strong> Understand that the modern world is an international community and requires an expanded global view.</td>
</tr>
<tr>
<td><strong>9.6</strong> Respect individual and cultural differences and recognize the importance of diversity in the workplace.</td>
</tr>
<tr>
<td><strong>9.7</strong> Participate in interactive teamwork to solve real Manufacturing and Product Design sector issues and problems.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.0 Technical Knowledge and Skills - (Used throughout all units of study.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10.1</strong> Interpret and explain terminology and practices specific to the Manufacturing and Product Design sector.</td>
</tr>
<tr>
<td><strong>10.2</strong> Comply with the rules, regulations, and expectations of all aspects of the Manufacturing and product Design sector.</td>
</tr>
<tr>
<td><strong>10.3</strong> Construct projects and products specific to the Manufacturing and Product Design sector requirements and expectations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11.0 Demonstration and Application - (Used throughout all units of study.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11.5</strong> Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pathway Standards: Manufacturing and Product Development:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1.0</strong> Apply the basic graphic design principles to achieve effective visual communication.</td>
</tr>
<tr>
<td><strong>A1.3</strong> Create a basic layout applying images, text, and typography.</td>
</tr>
<tr>
<td><strong>A1.4</strong> Create and choose font styles.</td>
</tr>
<tr>
<td><strong>A4.0</strong> Demonstrate technical illustration and vector drawing skills.</td>
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</tbody>
</table>

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<thead>
<tr>
<th>CTE ELA Standards:</th>
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</thead>
<tbody>
<tr>
<td><strong>Anchor Standard 11: Demonstration and Application -</strong> Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.</td>
</tr>
</tbody>
</table>

business. Produce a final digital layout. Project deliverables will include a business card, marketing flyer, and a brochure. All work submitted must comply with the use of good elements of design.
### Meeting the Needs of ELs:

- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards: [http://www.cde.ca.gov/sp/el/er/documents/eldstndspublsctn14.pdf](http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf)
- In 2014, the CA Department of Education adopted new ELA-ELD Framework, with specific strategies designed to meet the needs of EL students. Visit the following URL to learn more about the new frameworks: [http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf](http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf)

### Instructional Resources:

- Graphic Communications, the Printed Image, by Z.Z. Prust
- Graphic Design Basics, by Amy E. Arntson
- The Non-Designer’s Design & Type Books, by Robin Williams
- [http://www.adobe.com](http://www.adobe.com)
- [https://canvas.instructure.com](https://canvas.instructure.com)
- Apple computers
- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com) - for graphic design information
- [https://canvas.instructure.com](https://canvas.instructure.com) - for curriculum, assignments, and helps
- [https://wordpress.com](https://wordpress.com) - student portfolios (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT) - a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership
Printing & Graphics 1 Scope and Sequence
Unit 4 – Digital Prepress

<table>
<thead>
<tr>
<th>Unit Standards:</th>
<th>Learning Objectives:</th>
<th>Unit Assignments:</th>
<th>Unit Assessments:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anchor Standards Manufacturing and Product Development</strong></td>
<td>Students will be able to…</td>
<td>• Research project: <strong>Using information from the previous units (career exploration activities) students will continue to enhance their understanding of the industry expectations. They will respond to the following questions: What is the job forecast for printers and/or graphic designers today in the USA? Students will research the current job forecast as well as job categories in the field of printing and graphic design. Students will evaluate the job they would be best suited for and compose a paper stating their results. Students will use all of this information to enhance and redesign their professional resume and cover letter.</strong></td>
<td>• Formative assessment of appropriate fonts for different businesses (competency check off)</td>
</tr>
<tr>
<td><strong>Knowledge and Performance Anchor Standards:</strong></td>
<td>• Identify different computer platforms.</td>
<td><strong>PROJECT 1:</strong> Students will design a paper with graphics and text describing the digital press process. This will be a summative unit assessment demonstrating digital press processes.</td>
<td><strong>PROJECT 2:</strong> This will be a summative unit assessment demonstrating digital press processes.</td>
</tr>
<tr>
<td><strong>2.0 Communication Anchor Standards</strong> - (Used throughout all units of study)</td>
<td>• Explain the characteristics of different types of storage devices.</td>
<td><strong>PROJECT 2:</strong> Prepare text and graphics (pre-press preparation) for a company newsletter utilizing skills from Illustrator, Photoshop, and InDesign storing each as individual application files (II, PS, and ID), then exporting the ID file (they should all end up in InDesign) as a .pdf file for storage and transport.</td>
<td><strong>Formative assessment of proofreading a document prior to printing</strong></td>
</tr>
<tr>
<td>• 2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.</td>
<td>• Differentiate between various output devices.</td>
<td><strong>Digital Press Processes Assessment</strong></td>
<td><strong>Summative assessment of the use of Illustrator, Photoshop, and InDesign as they work together in the digital world (results taken from Project 2)</strong></td>
</tr>
<tr>
<td><strong>4.0 Technology Anchor Standards</strong> - (Used throughout all units of study.)</td>
<td>• Explain the processes used in text and graphics preparation.</td>
<td><strong>Formative assessment of formatting text and graphics (competency check off)</strong></td>
<td><strong>Summative assessment of the process of exporting data to pdf (results taken from Project 2)</strong></td>
</tr>
<tr>
<td>• 4.1 Use electronic reference materials to gather information and produce products and services.</td>
<td>• Summarize the features of page composition programs.</td>
<td></td>
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</tr>
<tr>
<td><strong>5.0 Problem Solving and Critical Thinking</strong> - (Used throughout all units of study.)</td>
<td>• Identify the techniques used in creating digital design files.</td>
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</tr>
<tr>
<td>• 5.1 Identify and ask significant questions that clarify various points of view to solve problems.</td>
<td>• Explain the proofreading process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.</td>
<td>• Evaluate the digital prepress workflow.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.0 Health and Safety</strong> - (Used throughout all units of study.)</td>
<td>• Produce the appropriate output required for a photograph, and predict the differences and produce appropriately when the photograph is then placed in the body of a flyer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 6.3 Use health and safety practice for storing, cleaning and maintaining tools, equipment, and supplies.</td>
<td>• Plan and produce a digital page layout of a two page document containing photographs, text, and hyperlinks</td>
<td></td>
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</tr>
<tr>
<td><strong>7.0 Responsibility and Flexibility</strong> - (Used throughout all units of study.)</td>
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<tr>
<td>• 7.1 Understand the need to adapt to changing and varied roles and responsibilities.</td>
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<tr>
<td><strong>9.0 Leadership and Teamwork</strong> - (Used throughout all units of study.)</td>
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<tr>
<td>• 9.6 Respect individual and cultural differences and recognize the importance of diversity in the workplace.</td>
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</tr>
</tbody>
</table>
10.1 Interpret and explain terminology and practices specific to the Manufacturing and Product Design sector.
10.2 Comply with the rules, regulations, and expectations of all aspects of the Manufacturing and product Design sector.

11.0 Demonstration and Application - (Used throughout all units of study.)

11.3 Demonstrate entrepreneurship skills and knowledge of self-employment options and innovative ventures.

**Pathway Standards: Manufacturing and Product Development:**

- A3.1 Differentiate between and operate Macintosh (Mac) and personal computer (PC) platforms for development.
- A3.2 Apply desktop publishing and electronic imaging software principles and processes used to prepare graphic design products.
- A6.0 Apply the processes and procedures involved in producing image files for the reproductions of single-color and multicolor products.

**CTE ELA Standards:**

- **Anchor Standard 11: Demonstration and Application**
  Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.

- **Writing Standards:** 11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
Meeting the Needs of ELs:

- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards: http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf
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- The Non-Designer’s Design & Type Books, by Robin Williams
- http://www.cde.ca.gov
- https://canvas.instructure.com
- Apple computers
- Adobe Creative Suite (software)
- http://www.lynda.com
- http://www.adobe.com - for graphic design information
- https://canvas.instructure.com - for curriculum, assignments, and helps
- https://wordpress.com - student portfolios (digital)
- https://translate.google.com/?hl=en&tab=wt - a communications resource for non-English speakers
- http://www.printing.org GAIN – Graphic Arts Information Network
- http://www.gaerf.org Organization with resources regarding accreditation. It also has student design competitions.
- www.sgppartnership.org Sustainable Green Printing Partnership
# Printing & Graphics 1 Scope and Sequence
## Unit 5 – Digital Image Capture and Color Science

This unit will lead students on a journey into the field of digital imaging technology and the types of equipment and methods involved in electronic image capture. Adobe Creative Suite will provide a suite of applications in which to place and edit the images captured. The strength of this suite of applications is that Photoshop, Illustrator, and InDesign all work together to provide a professional end product. In addition, students will be learning about color science, vision, and space. Students will learn and develop a basic understanding of color and the ways to describe the relationships between colors in order to be able to use it as an important design element. At the end of this unit, students will be able to explain and produce color separations for use in digital printing and screen-printing. Students will create color schemes for use in product marketing. Students will produce a one-color screen print and the copy for a two-color separation.

<table>
<thead>
<tr>
<th>Unit Standards</th>
<th>Learning Objectives</th>
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<th>Unit Assessments</th>
</tr>
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<tbody>
<tr>
<td><strong>Anchor Standards Manufacturing and Product Development</strong></td>
<td><strong>Knowledge and Performance Anchor Standards:</strong></td>
<td>Students will read and discuss chapters 8 and 9 in their primary textbook.</td>
<td><strong>Illustrator, create your own color wheel performance based assessment</strong></td>
</tr>
<tr>
<td><strong>2.0 Communication Anchor Standards</strong> - (Used throughout all units of study)</td>
<td>• 2.0 Acquire and accurately use Manufacturing and Product Design sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.</td>
<td>Synthesizing what they have learned, students will be able to produce an appropriate color scheme relative to the businesses assigned by the instructor. Students will provide a relevant marketing packet, and explain it orally before a group of peers.</td>
<td><strong>Formative assessments using Photoshop</strong></td>
</tr>
<tr>
<td><strong>4.0 Technology Anchor Standards</strong> - (Used throughout all units of study.)</td>
<td>• 4.0 Technology -Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Manufacturing and Product Design sector workplace environment. (Direct alignment with WS 11-12.6)</td>
<td>Capture an image and place it into Photoshop. Adjust the size, lighting, and tones. Prepare photo for photo restoration.</td>
<td><strong>Formative assessment using Illustrator</strong></td>
</tr>
<tr>
<td><strong>5.0 Problem Solving and Critical Thinking</strong> - (Used throughout all units of study.)</td>
<td>• 5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.</td>
<td>PROJECT: Students will bring an old photo from home, digitize, and restore it including fixing color, tone, eliminate fold-marks and sizing. Colorize if desired. This new photograph can be printed on photo paper and saved. It also needs to be submitted for a grade through Canvas by Instructure with a written explanation of the work done on the photograph to transfer it to its now digitized, restored state.</td>
<td><strong>Formative assessment demonstrating the ability to create a four-page signature for printing</strong></td>
</tr>
<tr>
<td><strong>6.0 Health and Safety</strong> - (Used throughout all units of study.)</td>
<td>• 6.7 Maintain a safe and healthful working environment.</td>
<td>Students will use the Adobe application Illustrator to create their own color wheel. From this color wheel, students will create the following color schemes: monochromatic, complementary, and triad.</td>
<td><strong>Summative assessment using Photoshop</strong></td>
</tr>
<tr>
<td><strong>7.0 Responsibility and Flexibility</strong> - (Used throughout all units of study.)</td>
<td>• 7.2 Explain the importance of accountability and responsibility in fulfilling personal, community, and workplace roles.</td>
<td>Students will create a one-color screen print using the Adobe application Illustrator. Students will also create a two-color screen print including crop marks. The one color print will be completed in the</td>
<td><strong>Summative assessment demonstrating knowledge of screen-printing by completing a one-color print</strong></td>
</tr>
</tbody>
</table>

### Unit Description: Chapters 8, 9 Digital Image Capture, and Color Science

- **Chapter 8: Digital Image Capture**
  - **Unit Assignments:**
    - Students will read and discuss chapters 8 and 9 in their primary textbook.
  - **Unit Assessments:**
    - Synthesizing what they have learned, students will be able to produce an appropriate color scheme relative to the businesses assigned by the instructor. Students will provide a relevant marketing packet, and explain it orally before a group of peers.

- **Chapter 9: Color Science**
  - **Unit Assignments:**
    - Capture an image and place it into Photoshop. Adjust the size, lighting, and tones. Prepare photo for photo restoration.
  - **Unit Assessments:**
    - PROJECT: Students will bring an old photo from home, digitize, and restore it including fixing color, tone, eliminate fold-marks and sizing. Colorize if desired. This new photograph can be printed on photo paper and saved. It also needs to be submitted for a grade through Canvas by Instructure with a written explanation of the work done on the photograph to transfer it to its now digitized, restored state.
    - Students will use the Adobe application Illustrator to create their own color wheel. From this color wheel, students will create the following color schemes: monochromatic, complementary, and triad.
    - Students will create a one-color screen print using the Adobe application Illustrator. Students will also create a two-color screen print including crop marks. The one color print will be completed in the

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<table>
<thead>
<tr>
<th>Chapters</th>
<th>Focus</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>Digital Image Capture</td>
</tr>
<tr>
<td>9</td>
<td>Color Science</td>
</tr>
</tbody>
</table>

**Assessment Methods:**
- **Formative:**
  - In_class
  - Group_work
- **Summative:**
  - Project_based
  - Test_based

**Technology Integration:**
- Adobe Creative Suite: Photoshop, Illustrator, InDesign
- Adobe Creative Suite applications are used to provide a professional end product. Students will learn and develop a basic understanding of color and the ways to describe the relationships between colors in order to be able to use it as an important design element. At the end of this unit, students will be able to explain and produce color separations for use in digital printing and screen-printing. Students will create color schemes for use in product marketing. Students will produce a one-color screen print and the copy for a two-color separation.

**Unit Description:**
- **Anchor Standards:**
  - Manufacturing and Product Development
- **Knowledge and Performance Anchor Standards:**
  - Communication Anchor Standards
  - Technology Anchor Standards
  - Problem Solving and Critical Thinking
  - Health and Safety
  - Responsibility and Flexibility

**Unit Assignments:**
- Students will read and discuss chapters 8 and 9 in their primary textbook.
- Synthesizing what they have learned, students will be able to produce an appropriate color scheme relative to the businesses assigned by the instructor. Students will provide a relevant marketing packet, and explain it orally before a group of peers.
- Capture an image and place it into Photoshop. Adjust the size, lighting, and tones. Prepare photo for photo restoration.
- PROJECT: Students will bring an old photo from home, digitize, and restore it including fixing color, tone, eliminate fold-marks and sizing. Colorize if desired. This new photograph can be printed on photo paper and saved. It also needs to be submitted for a grade through Canvas by Instructure with a written explanation of the work done on the photograph to transfer it to its now digitized, restored state.
- Students will use the Adobe application Illustrator to create their own color wheel. From this color wheel, students will create the following color schemes: monochromatic, complementary, and triad.
- Students will create a one-color screen print using the Adobe application Illustrator. Students will also create a two-color screen print including crop marks. The one color print will be completed in the
- 9.3 Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace setting.

**10.0 Technical Knowledge and Skills** - (Used throughout all units of study.)
- 10.3 Construct projects and products specific to the Manufacturing and Product Design sector requirements and expectations.

**11.0 Demonstration and Application** - (Used throughout all units of study.)
- 11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Manufacturing and Product Design sector program of study.

**Pathway Standards: Manufacturing and Product Development:**
- A6.0 Apply the processes and procedures involved in production image files for the reproductions of single-color and multicolor products.
- A6.1 Identify the variables that affect the image transfer process for reproduction.
- A6.2 Employ the process for creating image files that are appropriate for graphic design reproduction and specified printing requirements.

**CTE ELA Standards:**
- Anchor Standard 11: Demonstration and Application
  Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.
- 11-12.3 Write narratives to develop real or imaged experiences or events using effective technique, well-chosen details, and well-constructed event sequences.

- Students will create a four-page signature, numbering the pages to show how it will be set up for print.
Meeting the Needs of ELs:

- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards: [http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf](http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf)
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- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com)
- [http://www.adobe.com](http://www.adobe.com) - for graphic design information
- [https://canvas.instructure.com](https://canvas.instructure.com) - for curriculum, assignments, and helps
- [https://wordpress.com](https://wordpress.com) - student portfolios (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT) - a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership
# Printing & Graphics 1 Scope and Sequence

## Unit 6 – Capstone Project

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<th>Learning Objectives:</th>
<th>Unit Assignments:</th>
<th>Unit Assessments:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anchor Standards Manufacturing and Product Development Knowledge and Performance Anchor Standards:</strong></td>
<td><strong>Students will be able to present the following deliverables:</strong></td>
<td>• This project is the culmination of all of the first level work. The scrapbook’s purpose is both procedural and metacognitive in nature. Students will build the scrapbook project for their portfolio, and to demonstrate skills learned that could provide them with future employment in this field. Students will synthesize what they have learned this year by constructing and creating a book consisting of two – four page signatures utilizing the good practices of graphic design and providing both an end product and presenting it orally before the class (or group of peers.) Thumbnail sketches, rough drafts, and proof copies will be constructed prior to any design work. Adobe Creative Suite’s applications (Photoshop, Illustrator, InDesign) will be used to process different parts of this assignment, depending on what part the student is working on. Photoshop will be used to enhance and restore photographs, Illustrator will be used for all vector graphics and font manipulation, InDesign will be the final resting place for both photographs and graphics. Project will be saved for InDesign (for editing), and in pdf format for exporting to digitally print.</td>
<td>• Summative assessment on appropriate use of Adobe Creative Suite’s Photoshop, Illustrator, and InDesign • Summative assessment in digital set up and printing skills, use of signatures, and bindery work (folding, trimming, and stitching) • Summative assessment in working together in the area of proofing at least one other person’s scrapbook • Summative assessment in the use of color schemes, font choices, continuity of design, a common graphic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2.0 Communication Anchor Standards</strong> - (Used throughout all units of study.)</th>
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<tbody>
<tr>
<td>2.0 Acquire and accurately use Manufacturing and Product Design sector terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.</td>
<td>• 2- four page signatures, properly numbered.</td>
<td><strong>Unit Description:</strong> This unit is the creation of a capstone project utilizing all of the skills throughout the year. Students will be incorporating all of the acquired skills for the year by creating a digital scrapbook. In level one, students have been given an overview of printing and graphics, as well as having been taught how to use Adobe Creative Suite’s Illustrator, Photoshop, and InDesign. They have synthesized skills necessary to use page layout tools, how to size images relative to number of pixels, and how to reconstruct and restore photographs utilizing editing tools. Students know how to design a color scheme for their project, and build a grouping of font faces to communicate a visual message to their audience. Students will produce the traditional thumbnail sketches, rough drafts, and proof copies for instructor approval. Students will import, export, and save their scrapbook for future editing and for export to digital print. Students will plan and present the steps they took to construct their capstone project to the class and/or group of peers in an oral presentation.</td>
<td></td>
</tr>
<tr>
<td>2.1 Recognize the elements of communication using a sender-receiver model.</td>
<td>• Photo restoration (show before and after.)</td>
<td><strong>Unit Standards:</strong></td>
<td></td>
</tr>
<tr>
<td>2.4 Demonstrate elements of written and electronic communication such as accurate spelling, grammar, and format.</td>
<td>• Color scheme for scrapbook.</td>
<td><strong>Knowledge and Performance Anchor Standards:</strong></td>
<td></td>
</tr>
<tr>
<td>2.5 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.</td>
<td>• Correct spelling.</td>
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<tr>
<td><strong>4.0 Technology Anchor Standards</strong> - (Used throughout all units of study.)</td>
<td>• Appropriate use and number of different fonts.</td>
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<tr>
<td><strong>4.0 Technology</strong> - Use existing and emerging technology, to investigate, research, and produce products and services, including new information, as required in the Manufacturing and Product Design sector workplace environment. (Direct alignment with WS 11-12.6)</td>
<td>• Produce appropriately grouped “like objects”.</td>
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<tr>
<td>4.1 Use electronic reference materials to gather information and produce products and services.</td>
<td>• Construct the piece of artwork that becomes the common thread unifying your scrapbook.</td>
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<td>7.5 Apply high-quality techniques to product or presentation design and development.</td>
<td>• Title that describes your scrapbook.</td>
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<td></td>
<td>• Set up for 11/17 folded into 8.5 x 11 inch pages.</td>
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<tr>
<td></td>
<td>• Stitched center binding.</td>
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<td></td>
<td>• Trimmed edges.</td>
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<td></td>
<td>• Proofed for mistakes (give instructor the name of the person who proofed your work.</td>
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<td></td>
<td>• Present to class or group of peers orally. This presentation does not need to be more than five minutes long and students can go up in groups.</td>
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<td><strong>Unit Assignments:</strong></td>
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<td>• This project is the culmination of all of the first level work. The scrapbook’s purpose is both procedural and metacognitive in nature. Students will build the scrapbook project for their portfolio, and to demonstrate skills learned that could provide them with future employment in this field. Students will synthesize what they have learned this year by constructing and creating a book consisting of two – four page signatures utilizing the good practices of graphic design and providing both an end product and presenting it orally before the class (or group of peers.) Thumbnail sketches, rough drafts, and proof copies will be constructed prior to any design work. Adobe Creative Suite’s applications (Photoshop, Illustrator, InDesign) will be used to process different parts of this assignment, depending on what part the student is working on. Photoshop will be used to enhance and restore photographs, Illustrator will be used for all vector graphics and font manipulation, InDesign will be the final resting place for both photographs and graphics. Project will be saved for InDesign (for editing), and in pdf format for exporting to digitally print.</td>
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<td><strong>Unit Assessments:</strong></td>
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<td>• Summative assessment on appropriate use of Adobe Creative Suite’s Photoshop, Illustrator, and InDesign • Summative assessment in digital set up and printing skills, use of signatures, and bindery work (folding, trimming, and stitching) • Summative assessment in working together in the area of proofing at least one other person’s scrapbook • Summative assessment in the use of color schemes, font choices, continuity of design, a common graphic</td>
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<tr>
<td><strong>5.0 Problem Solving and Critical Thinking</strong> - (Used throughout all units of study.)</td>
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<tr>
<td>5.1 Identify and ask significant questions that clarify various points of view to solve problems.</td>
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<td>5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.</td>
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<td>5.4 Interpret information and draw conclusions, based on the best analysis, to make informed decisions.</td>
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<tr>
<th><strong>6.0 Health and Safety</strong> - (Used throughout all units of study)</th>
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<tr>
<td>Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Manufacturing and Product Design sector workplace environment. (Direct alignment with RSTS 9-10, 11-12.4)</td>
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<tr>
<td>6.3 Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.</td>
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<td>6.5 Practice personal safety when lifting, bending, or moving equipment and supplies.</td>
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<td>6.7 Maintain a safe and healthful working environment.</td>
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<tr>
<th><strong>7.0 Responsibility and Flexibility</strong> - (Used throughout all units of study.)</th>
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<tr>
<td>7.4 Practice time management and efficiency to fulfill responsibilities.</td>
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<tr>
<td>7.5 Apply high-quality techniques to product or presentation design and development.</td>
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<th><strong>9.0 Leadership and Teamwork</strong> - (Used throughout all units of study.)</th>
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<tr>
<td>9.3 Understand the characteristics and benefits of teamwork, leadership, and citizenship in the school, community, and workplace setting.</td>
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<td>9.6 Respect individual and cultural differences and recognize the importance of diversity in the workplace.</td>
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<tr>
<th><strong>10.0 Technical Knowledge and Skills</strong> - (Used throughout all units of study.)</th>
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<tbody>
<tr>
<td>10.3 Construct projects and products specific to the Manufacturing and Product Design sector requirements and expectations.</td>
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</table>

- Summative assessment in the oral presentation of the student’s scrapbook.
11.0 Demonstration and Application - (Used throughout all units of study.)

- 11.5 Create a portfolio, or similar collection of work, that offers evidence through assessment and evaluation of skills and knowledge competency as contained in the anchor standards, pathway standards, and performance indicators.

Pathway Standards: Manufacturing and Product Development:

- A1.0 Apply the basic graphic design principles to achieve effective visual communication.
- A1.3 Create a basic layout applying images, text, and typography.
- A1.4 Create and choose font styles.
- A3.0 Apply graphic design software and desktop publishing as a means of creating effective communication.
- A4.0 Demonstrate technical illustration and vector drawing skills.
- A6.0 Apply the processes and procedures involved in producing image files for the reproductions of single-color and multicolor products.

CTE ELA Standards:

- Anchor Standard 11: Demonstration and Application
  Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and the career technical student organization.
Meeting the Needs of ELs:

- Utilize the student information system to acquire the language levels of EUHSD English Learners.
- In 2012, the CA Department of Education adopted new language level proficiency descriptors and new EL state standards. Visit the following website to learn more about those new descriptors and corresponding standards: [http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf](http://www.cde.ca.gov/sp/el/er/documents/eldstndspublication14.pdf)
- In 2014, the CA Department of Education adopted new ELA-ELD Framework, with specific strategies designed to meet the needs of EL students. Visit the following URL to learn more about the new frameworks: [http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf](http://www.cde.ca.gov/ci/rl/cf/documents/elaeldfwchapter11.pdf)

Instructional Resources:

- Graphic Communications, the Printed Image, by Z.Z. Prust
- Graphic Design Basics, by Amy E. Arntson
- The Non-Designer’s Design & Type Books, by Robin Williams
- [http://www.adobe.com](http://www.adobe.com)
- [https://canvas.instructure.com](https://canvas.instructure.com)
- Apple computers
- Adobe Creative Suite (software)
- [http://www.lynda.com](http://www.lynda.com)- for graphic design information
- [https://canvas.instructure.com](https://canvas.instructure.com)- for curriculum, assignments, and helps
- [https://wordpress.com](https://wordpress.com)- student portfolios (digital)
- [https://translate.google.com/?hl=en&tab=wT](https://translate.google.com/?hl=en&tab=wT)- a communications resource for non-English speakers
- [http://www.printing.org](http://www.printing.org) GAIN – Graphic Arts Information Network
- [http://www.gaerf.org](http://www.gaerf.org) Organization with resources regarding accreditation. It also has student design competitions.
- [www.sgppartnership.org](http://www.sgppartnership.org) Sustainable Green Printing Partnership