### Commercial and Advertising Art, Classification of Instructional Program (CIP) 50.0402
Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

<table>
<thead>
<tr>
<th>Secondary Competency Task Grid with Unit and Task Numbers</th>
<th>Common Career Technical Core Standards</th>
<th>Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5</th>
<th>Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6</th>
<th>Pennsylvania Core Standards for Mathematics Standard 2.1</th>
</tr>
</thead>
</table>

#### 100 ORIENTATION.

| 101 Identify career paths and occupational requirements within the profession. | CAREER CLUSTER: Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6 | KEY IDEAS/DETAILS GRADES 9-10-11-12 Standard CC.3.5.9-10. A Standard CC.3.5.11-12 A Cite specific textual evidence, etc. Standard CC.3.5.9-10 B Standard CC.3.5.11-12. B Determine the central ideas or conclusions of a text; etc. Standard CC.3.5.9-10.C Standard CC.3.5.11-12.C Follow precisely a complex multistep procedure, etc. |
| 102 RESERVED | PATHWAYS INCLUDE: Printing Technology Career Pathway (Choose Standards) 1-2-3 | |
| 103 Demonstrate research, employability, and organizational skills. | Visual Arts Career Pathway (Choose Standards) 1-2-3 | |
| 104 Recognize copyright laws in communication. | NOTE: Refer to the Common Career Technical Core Standards Booklet if you wish to add more | |

CRAFT & STRUCTURE GRADES 9-10-11-12

| Standard CC.3.5.9-10.D Standard CC.3.5.11-12.D | Determine the meaning of symbols, key terms, and other domain specific words. Standard CC.3.5.9-10.E Standard CC.3.5.11-12.E | Analyze the structure of the relationships among concepts in a text, etc. |
| Pathways, for your local area. | Standard CC.3.5.9-10.F  
Standard CC.3.5.11-12.F  
Analyze the author’s purpose in providing an explanation, describing a procedure...and  
Analyze the structure of the relationships among concepts in a text.  
**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 9-10**  
Standard CC.3.5.9-10.G  
Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).  
Standard CC.3.5.9-10. H  
Assess the reasoning in a text to support the author’s claim for solving a technical problem.  
Standard CC.3.5.9-10. I  
Compare and contrast findings presented in a text to those from other sources, etc.  
**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 11-12**  
Standard CC.3.5.11-12. G  
Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.  
Standard CC.3.5.11-12. H  
Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.  
Standard CC.3.5.11-12. I  
Synthesize information from a range of sources into a coherent understanding.  
**RANGE OF READING**  
**GRADES 9-10-11-12**  
Standard CC.3.5.9-10.J |
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>200</strong></td>
<td><strong>SAFETY.</strong></td>
</tr>
<tr>
<td>201</td>
<td>Operate equipment incorporating ergonomics.</td>
</tr>
<tr>
<td>202</td>
<td>Use computer hardware, software and electronic equipment safely.</td>
</tr>
<tr>
<td>203</td>
<td>Use and maintain hand tools safely.</td>
</tr>
<tr>
<td>204</td>
<td>Use, store, and dispose of paints, solvents, and chemicals according to OSHA regulations.</td>
</tr>
<tr>
<td>205</td>
<td>Practice safe cutting procedures.</td>
</tr>
<tr>
<td>206</td>
<td>Practice knowledge of hazard communication law/environmental protection, to include SDS.</td>
</tr>
</tbody>
</table>

**CAREER CLUSTER:**
Arts, AV Technology and Communications Career Cluster (Choose Standards) 1-2-3-4-5-6

**PATHWAYS INCLUDE:**
- Printing Technology Career Pathway (Choose Standards) 1-2-3
- Visual Arts Career Pathway (Choose Standards) 1-2-3

**NOTE:**
Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.

**KEY IDEAS/DETAILS**
**GRADES 9-10-11-12**
- Standard CC.3.5.9-10. A
- Standard CC.3.5.11-12 A
- Cite specific textual evidence, etc.
- Standard CC.3.5.9-10 B
- Standard CC.3.5.11-12. B
- Determine the central ideas or conclusions of a text; etc.
- Standard CC.3.5.9-10.C
- Standard CC.3.5.11-12.C
- Follow precisely a complex multistep procedure, etc.

**CRAFT & STRUCTURE**
**GRADES 9-10-11-12**
- Standard CC.3.5.9-10. D
- Standard CC.3.5.11-12.D
- Determine the meaning of symbols, key terms, and other domain specific words.
- Standard CC.3.5.9-10.E
- Standard CC.3.5.11-12.E
- Analyze the structure of the relationships among concepts in a text, etc.
- Standard CC.3.5.9-10.F
- Standard CC.3.5.11-12.F
- Analyze the author’s purpose in providing an explanation, describing a procedure...and
- Analyze the structure of the relationships among concepts in a text.

**INTEGRATE KNOWLEDGE & IDEAS**
**GRADES 9-10**
Standard CC.3.5.9-10.G
Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

Standard CC.3.5.9-10. H
Assess the reasoning in a text to support the author’s claim for solving a technical problem.

Standard CC.3.5.9-10. I
Compare and contrast findings presented in a text to those from other sources, etc.

INTEGRATE KNOWLEDGE & IDEAS
GRADES 11-12
Standard CC.3.5.11-12. G
Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

Standard CC.3.5.11-12. H
Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

Standard CC.3.5.11-12. I
Synthesize information from a range of sources into a coherent understanding.

RANGE OF READING
GRADES 9-10-11-12
Standard CC.3.5.9-10. J
By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

CAREER CLUSTER: Arts, AV Technology and Communications Career Cluster
(Choose Standards)

KEY IDEAS/DETAILS
GRADES 9-10-11-12
Standard CC.3.5.9-10. A
Standard CC.3.5.11-12 A
Cite specific textual evidence, etc.

Standard CC.3.5.9-10 B

NUMBERS AND OPERATIONS
Standard 2.1.HS.F.2
Apply properties of rational and irrational numbers to
Apply anatomy concepts in drawing.

Draw from direct observation.

Produce illustrations using various media.

Illustrate using value.

PATHWAYS INCLUDE:

Printing Technology Career Pathway
(Choose Standards) 1-2-3

Visual Arts Career Pathway
(Choose Standards) 1-2-3

NOTE:
Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.

Standard CC.3.5.11-12. B
Determine the central ideas or conclusions of a text, etc.

Standard CC.3.5.9-10.C
Standard CC.3.5.11-12.C
Follow precisely a complex multistep procedure, etc.

CRAFT & STRUCTURE
GRADES 9-10-11-12
Standard CC.3.5.9-10. D
Standard CC.3.5.11-12.D
Determine the meaning of symbols, key terms, and other domain specific words.

Standard CC.3.5.9-10.E
Standard CC.3.5.11-12.E
Analyze the structure of the relationships among concepts in a text, etc.

Standard CC.3.5.9-10.F
Standard CC.3.5.11-12.F
Analyze the author’s purpose in providing an explanation, describing a procedure...and
Analyze the structure of the relationships among concepts in a text.

INTEGRATE KNOWLEDGE & IDEAS
GRADES 9-10
Standard CC.3.5.9-10.G
Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

Standard CC.3.5.9-10. H
Assess the reasoning in a text to support the author’s claim for solving a technical problem.

Standard CC.3.5.9-10. I
Compare and contrast findings presented in a text to those from other sources, etc.

solve real world or mathematical problems.

Standard 2.1.HS.F.4
Use units as a way to understand problems and to guide the solution of multistep problems.

Standard 2.1.HS.F.5
Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Standard 2.1.HS.F.6
Extend the knowledge of arithmetic operations and apply to complex numbers.
### INTEGRATE KNOWLEDGE & IDEAS
**GRADES 11-12**

- **Standard CC.3.5.11-12.G**
  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

- **Standard CC.3.5.11-12.H**
  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

- **Standard CC.3.5.11-12.I**
  Synthesize information from a range of sources into a coherent understanding.

### RANGE OF READING
**GRADES 9-10-11-12**

**Standard CC.3.5.9-10.J**
**Standard CC.3.5.11-12.J**

By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

---

### COLOR THEORY AND APPLICATION.

<table>
<thead>
<tr>
<th>400</th>
<th><strong>COLOR THEORY AND APPLICATION.</strong></th>
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</thead>
<tbody>
<tr>
<td>401</td>
<td><strong>401</strong> Apply the basic structure of color (hue, saturation, brightness) to generate color solutions.</td>
</tr>
<tr>
<td>402</td>
<td><strong>402</strong> Apply appropriate color schemes to generate design solutions.</td>
</tr>
<tr>
<td>403</td>
<td><strong>403</strong> Identify color models including additive and subtractive color.</td>
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<tr>
<th>CAREER CLUSTER:</th>
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<tbody>
<tr>
<td><strong>Arts, AV Technology and Communications Career Cluster</strong></td>
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<tr>
<th>PATHWAYS INCLUDE:</th>
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<tr>
<td><strong>Visual Arts Career Pathway</strong></td>
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<tr>
<th><strong>KEY IDEAS/DETAILS</strong></th>
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<tr>
<td><strong>GRADES 9-10-11-12</strong></td>
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<tr>
<td><strong>Standard CC.3.5.9-10.A</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.5.11-12.A</strong></td>
</tr>
<tr>
<td><strong>Cite specific textual evidence, etc.</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.5.9-10.B</strong></td>
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<tr>
<td><strong>Standard CC.3.5.11-12.B</strong></td>
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<td><strong>Determine the central ideas or conclusions of a text; etc.</strong></td>
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<tr>
<td><strong>Standard CC.3.5.9-10.C</strong></td>
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<tr>
<td><strong>Standard CC.3.5.11-12.C</strong></td>
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<tr>
<td><strong>Follow precisely a complex multistep procedure, etc.</strong></td>
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<thead>
<tr>
<th><strong>CRAFT &amp; STRUCTURE</strong></th>
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<td><strong>Standard CC.3.5.11-12.D</strong></td>
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<th><strong>TEXT TYPES AND PURPOSE</strong></th>
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<tbody>
<tr>
<td><strong>GRADES 9-10-11-12</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.6.9-10.A</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.6.11-12.A</strong></td>
</tr>
<tr>
<td><strong>Write arguments focused on discipline specific content.</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.6.9-10.B</strong></td>
</tr>
<tr>
<td><strong>Standard CC.3.6.11-12.B</strong></td>
</tr>
<tr>
<td><strong>Write informative or explanatory texts, including the narration of technical processes, etc.</strong></td>
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<tr>
<th><strong>PRODUCTION &amp; DISTRIBUTION OF WRITING</strong></th>
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<td>Standard CC.3.5.9-10.E</td>
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<td>Standard CC.3.5.11-12.F</td>
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<td><strong>INTEGRATE KNOWLEDGE &amp; IDEAS</strong></td>
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<td><strong>GRADES 9-10</strong></td>
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<td>Standard CC.3.5.9-10.G</td>
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<td>Standard CC.3.5.9-10.H</td>
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<td>Standard CC.3.5.9-10.I</td>
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<td><strong>Standard CC.3.6.11-12.D</strong></td>
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<td>Standard CC.3.6.9-10.F</td>
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<td><strong>Standard CC.3.6.11-12.G</strong></td>
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<td><strong>RANGE OF WRITING</strong></td>
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<td>Standard CC.3.5.9-10.I</td>
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<th>CAREER CLUSTER:</th>
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<td>Arts, AV Technology and Communications Career Cluster</td>
<td>GRADES 9-10-11-12</td>
</tr>
<tr>
<td>(Choose Standards) 1-2-3-4-5-6</td>
<td>Standard CC.3.5.9-10. A</td>
</tr>
<tr>
<td>PATHWAYS INCLUDE:</td>
<td>Standard CC.3.5.11-12 A</td>
</tr>
<tr>
<td>Printing Technology Career Pathway</td>
<td>Cite specific textual evidence, etc.</td>
</tr>
<tr>
<td>(Choose Standards) 1-2-3</td>
<td>Standard CC.3.5.11-12.B</td>
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<tr>
<td>Visual Arts Career Pathway</td>
<td>Determine the central ideas or conclusions of a text; etc.</td>
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<tr>
<td>(Choose Standards) 1-2-3</td>
<td>Standard CC.3.5.9-10.C</td>
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<tr>
<td>NOTE:</td>
<td>Standard CC.3.5.11-12.C</td>
</tr>
<tr>
<td>Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.</td>
<td>Follow precisely a complex multistep procedure, etc.</td>
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</table>

<table>
<thead>
<tr>
<th>TEXT TYPES AND PURPOSE</th>
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</thead>
<tbody>
<tr>
<td>GRADES 9-10-11-12</td>
</tr>
<tr>
<td>Standard CC.3.6.9-10. A</td>
</tr>
<tr>
<td>Write arguments focused on discipline specific content.</td>
</tr>
<tr>
<td>Standard CC.3.6.9-10.B</td>
</tr>
<tr>
<td>Standard CC.3.6.11-12.B</td>
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<td>Write informative or explanatory texts, including the narration of technical processes, etc.</td>
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<tr>
<th>NUMBERS AND OPERATIONS</th>
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<tbody>
<tr>
<td>Standard 2.1.HS.F.2</td>
</tr>
<tr>
<td>Apply properties of rational and irrational numbers to solve real world or mathematical problems.</td>
</tr>
<tr>
<td>Standard 2.1.HS.F.4</td>
</tr>
<tr>
<td>Use units as a way to understand problems and to guide the solution of multistep problems.</td>
</tr>
<tr>
<td>Standard 2.1.HS.F.5</td>
</tr>
<tr>
<td>Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.</td>
</tr>
<tr>
<td>Standard 2.1.HS.F.6</td>
</tr>
<tr>
<td>Extend the knowledge of arithmetic operations and apply to complex numbers.</td>
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</table>

<table>
<thead>
<tr>
<th>GEOMETRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 2.3.HS.A.13</td>
</tr>
<tr>
<td>Analyze relationships between two dimensional and three dimensional objects.</td>
</tr>
</tbody>
</table>
Analyze the structure of the relationships among concepts in a text.

**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 9-10**  
**Standard CC.3.5.9-10.G**  
Translate quantitative or technical information expressed in a text into visual form (e.g., a table or chart).

**Standard CC.3.5.9-10.H**  
Assess the reasoning in a text to support the author’s claim for solving a technical problem.

**Standard CC.3.5.9-10.I**  
Compare and contrast findings presented in a text to those from other sources, etc.

**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 11-12**  
**Standard CC.3.5.11-12.G**  
Integrate and evaluate multiple sources of information presented in diverse formats to solve a problem.

**Standard CC.3.5.11-12.H**  
Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

**Standard CC.3.5.11-12.I**  
Synthesize information from a range of sources into a coherent understanding.

**RANGE OF READING**  
**GRADES 9-10-11-12**  
**Standard CC.3.5.9-10.J**  
By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

**Standard CC.3.6.9-10.E**  
Use technology, including the internet, to produce, publish, and update individual or shared writing products.

**RESEARCH**  
**GRADES 9-10-11-12**  
**Standard CC.3.6.9-10.F**  
**Standard CC.3.6.11-12.F**  
Conduct short and more sustained research to answer a question or solve a problem.

**Standard CC.3.6.9-10.G**  
**Standard CC.3.6.11-12.G**  
Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.

**Standard CC.3.6.9-10.H**  
**Standard CC.3.6.11-12.H**  
Draw evidence from informational texts to support analysis, reflection, and research.

**RANGE OF WRITING**  
**GRADES 9-10-11-12**  
**Standard CC.3.5.9-10.I & Standard CC.3.5.11-12.I.**  
Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.
<table>
<thead>
<tr>
<th>600</th>
<th>DESIGN, LAYOUT, AND PRODUCTION.</th>
</tr>
</thead>
<tbody>
<tr>
<td>601</td>
<td>Research the history of advertising design.</td>
</tr>
<tr>
<td>602</td>
<td>Apply elements and principles of design.</td>
</tr>
<tr>
<td>603</td>
<td>Interpret a creative or design brief.</td>
</tr>
<tr>
<td>604</td>
<td>Produce thumbnails, roughs and comprehensive.</td>
</tr>
<tr>
<td>605</td>
<td>Design a logo.</td>
</tr>
<tr>
<td>606</td>
<td>Create a design for a package.</td>
</tr>
<tr>
<td>607</td>
<td>Utilize basic knowledge of printing processes.</td>
</tr>
<tr>
<td>608</td>
<td>Design promotional materials.</td>
</tr>
<tr>
<td>609</td>
<td>Prepare files for output.</td>
</tr>
<tr>
<td>610</td>
<td>Utilize printer’s marks and prepare color separations.</td>
</tr>
<tr>
<td>611</td>
<td>Execute knowledge of basic math, proportions, and measurements.</td>
</tr>
</tbody>
</table>

**CAREER CLUSTER:**
Arts, AV Technology and Communications Career Cluster
(Choose Standards) 1-2-3-4-5-6

**PATHWAYS INCLUDE:**
Printing Technology Career Pathway
(Choose Standards) 1-2-3
Visual Arts Career Pathway
(Choose Standards) 1-2-3

**NOTE:**
Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.

**KEY IDEAS/DETAILS**

**GRADES 9-10-11-12**

**Standard CC.3.5.9-10. A**
Cite specific textual evidence, etc.

**Standard CC.3.5.11-12 A**
Determine the central ideas or conclusions of a text, etc.

**Standard CC.3.5.11-12. B**
Follow precisely a complex multistep procedure, etc.

**CRAFT & STRUCTURE**

**GRADES 9-10-11-12**

**Standard CC.3.5.9-10. D**
Determine the meaning of symbols, key terms, and other domain specific words.

**Standard CC.3.5.9-10.E**
Analyze the structure of the relationships among concepts in a text, etc.

**Standard CC.3.5.11-12. E**
Analyze the author’s purpose in providing an explanation, describing a procedure, and the structure of the relationships among concepts in a text.

**INTEGRATE KNOWLEDGE & IDEAS**

**GRADES 9-10**

**Standard CC.3.5.9-10.G**
Translate quantitative or technical information expressed in a text into visual form (e.g., a table or chart).

**TEXT TYPES AND PURPOSE**

**GRADES 9-10-11-12**

**Standard CC.3.6.9-10. A**
Write arguments focused on discipline specific content.

**Standard CC.3.6.9-10.B**
Write informative or explanatory texts, including the narration of technical processes, etc.

**PRODUCTION & DISTRIBUTION OF WRITING**

**GRADES 9-10-11-12**

**Standard CC.3.6.9-10.C**
Produce clear and coherent writing, and three dimensional objects.

**Standard CC.3.6.9-10.D**
Extend the knowledge of arithmetic operations and apply to complex numbers.

**GEOMETRY**

**Standard 2.3.HS.A.13**
Analyze relationships between two dimensional and three dimensional objects.

**NUMBERS AND OPERATIONS**

**Standard 2.1.HS.F.2**
Apply properties of rational and irrational numbers to solve real world or mathematical problems.

**Standard 2.1.HS.F.4**
Use units as a way to understand problems and to guide the solution of multistep problems.

**Standard 2.1.HS.F.5**
Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

**Standard 2.1.HS.F.6**
Extend the knowledge of arithmetic operations and apply to complex numbers.
### Assess the reasoning in a text to support the author’s claim for solving a technical problem.

**Standard CC.3.5.9-10.**

Compare and contrast findings presented in a text to those from other sources, etc.

**INTEGRATE KNOWLEDGE & IDEAS**

**GRADES 11-12**

**Standard CC.3.5.11-12.**

Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

**Standard CC.3.5.11-12.**

Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

**Standard CC.3.5.11-12.**

Synthesize information from a range of sources into a coherent understanding.

### Conduct short and more sustained research to answer a question or solve a problem.

**Standard CC.3.6.9-10.G.**

**Standard CC.3.6.11-12.G.**

Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.

**Standard CC.3.6.9-10.H.**

**Standard CC.3.6.11-12.H.**

Draw evidence from informational texts to support analysis, reflection, and research.

### RANGE OF WRITING

**GRADES 9-10-11-12**

**Standard CC.3.5.11-12.**

Cite specific textual evidence, etc.

**Standard CC.3.5.11-12.**

Determine the central ideas or conclusions of a text; etc.

**Standard CC.3.5.11-12.**

Follow precisely a complex multistep procedure, etc.

### RANGE OF READING

**GRADES 9-10-11-12**

**Standard CC.3.5.11-12.**

By the end of grades 9- 10, AND 11-12, read and comprehend technical texts independently and proficiently.

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### TYPOGRAPHY.

<table>
<thead>
<tr>
<th>700</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>701</td>
<td>Identify the anatomy and classification of type.</td>
</tr>
<tr>
<td>702</td>
<td>Identify typographic styles.</td>
</tr>
<tr>
<td>703</td>
<td>Manipulate type through character and paragraph formatting.</td>
</tr>
<tr>
<td>704</td>
<td>Choose and apply appropriate typeface.</td>
</tr>
</tbody>
</table>

### CAREER CLUSTER:

**Arts, AV Technology and Communications Career Cluster**

(Choose Standards) 1-2-3-4-5-6

**PATHWAYS INCLUDE:**

Printing Technology Career Pathway

### KEY IDEAS/DETAILS

**GRADES 9-10-11-12**

**Standard CC.3.5.9-10. A**

Cite specific textual evidence, etc.

**Standard CC.3.5.9-10. B**

Determine the central ideas or conclusions of a text; etc.

**Standard CC.3.5.9-10. C**

Follow precisely a complex multistep procedure, etc.

### TEXT TYPES AND PURPOSE

**GRADES 9-10-11-12**

**Standard CC.3.6.9-10.A**

Write arguments focused on discipline specific content.

**Standard CC.3.6.9-10.B**

Write informative or explanatory texts, including the narration of technical processes, etc.

**Standard CC.3.6.9-10.C**

Apply properties of rational and irrational numbers to solve real world or mathematical problems.

**Standard CC.3.6.9-10.D**

Use units as a way to understand problems and to guide the solution of multistep problems.
NOTE:
Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.

CRAFT & STRUCTURE
GRADES 9-10-11-12
Standard CC.3.5.9-10. D
Standard CC.3.5.11-12. D
Determine the meaning of symbols, key terms, and other domain specific words.

Standard CC.3.5.9-10.E
Standard CC.3.5.11-12. E
Analyze the structure of the relationships among concepts in a text, etc.

Standard CC.3.5.9-10.F
Standard CC.3.5.11-12.F
Analyze the author’s purpose in providing an explanation, describing a procedure...and
Analyze the structure of the relationships among concepts in a text.

INTEGRATE KNOWLEDGE & IDEAS
GRADES 9-10
Standard CC.3.5.9-10.G
Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

Standard CC.3.5.9-10. H
Assess the reasoning in a text to support the author’s claim for solving a technical problem.

Standard CC.3.5.9-10. I
Compare and contrast findings presented in a text to those from other sources, etc.

INTEGRATE KNOWLEDGE & IDEAS
GRADES 11-12
Standard CC.3.5.11-12. G

PRODUCTION & DISTRIBUTION OF WRITING
GRADES 9-10-11-12
Standard CC.3.6.9-10.C
Standard CC.3.6.11-12 C
Produce clear and coherent writing...appropriate to task, purpose, and audience.

Standard CC.3.6.9-10 D
Standard CC.3.6.11-12.D
Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

Standard CC.3.6.9-10.E
Standard CC.3.6.11-12.E
Use technology, including the internet, to produce, publish, and update individual or shared writing products.

RESEARCH
GRADES 9-10-11-12
Standard CC.3.6.9-10.F
Standard CC.3.6.11-12.F
Conduct short and more sustained research to answer a question or solve a problem.

Standard CC.3.6.9-10.G.
Standard CC.3.6.11-12.G
Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.

Standard CC.3.6.9-10.H.
Standard CC.3.6.11-12.H.
Draw evidence from informational texts to support...
Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

**Standard CC.3.5.11-12. H**
Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

**Standard CC.3.5.11-12. I**
Synthesize information from a range of sources into a coherent understanding.

**RANGE OF READING**
**GRADES 9-10-11-12**
**Standard CC.3.5.11-12. J**
By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

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**800 DIGITAL PHOTOGRAPHY.**

| 801 | Operate digital camera and accessories. |
| 802 | Compose a photograph through the lens. |
| 803 | Differentiate lighting options and their effects. |
| 804 | Stabilize camera. |
| 805 | Download and manage digital images. |

**CAREER CLUSTER:**
**Arts, AV Technology and Communications Career Cluster**
(Choose Standards)
1-2-3-4-5-6

**PATHWAYS INCLUDE:**
**Printing Technology Career Pathway**
(Choose Standards)
1-2-3

**Visual Arts Career Pathway**
(Choose Standards)
1-2-3

**NOTE:**
Refer to the Common Career Technical Core

**KEY IDEAS/DETAILS**
**GRADES 9-10-11-12**
**Standard CC.3.5.9-10. A**
Cite specific textual evidence, etc.

**Standard CC.3.5.11-12 A**
Determine the central ideas or conclusions of a text; etc.

**Standard CC.3.5.9-10 B**
Determine the central ideas or conclusions of a text; etc.

**Standard CC.3.5.11-12. B**
Follow precisely a complex multistep procedure, etc.

**CRAFT & STRUCTURE**
**GRADES 9-10-11-12**
**Standard CC.3.5.9-10. D**
Determine the meaning of symbols, key terms, and other domain specific words.

**Standard CC.3.5.11-12.D**
Determine the meaning of symbols, key terms, and other domain specific words.

**TEXT TYPES AND PURPOSE**
**GRADES 9-10-11-12**
**Standard CC.3.6.9-10.A**
Write arguments focused on discipline specific content.

**Standard CC.3.6.11-12.A**
Write arguments focused on discipline specific content.

**Standard CC.3.6.9-10.B**
Write informative or explanatory texts, including the narration of technical processes, etc.

**PRODUCTION & DISTRIBUTION OF WRITING**
**GRADES 9-10-11-12**
**Standard CC.3.6.9-10.C**
Produce clear and coherent writing...appropriate to task, purpose, and audience.
Standards Booklet if you wish to add more Pathways, for your local area.

| Standards Booklet if you wish to add more Pathways, for your local area. |
|---|---|---|
| Analyze the structure of the relationships among concepts in a text, etc. | Analyze the author’s purpose in providing an explanation, describing a procedure...and Analyze the structure of the relationships among concepts in a text. |

**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 9-10**

- **Standard CC.3.5.9-10.G**  
  Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

- **Standard CC.3.5.9-10.H**  
  Assess the reasoning in a text to support the author’s claim for solving a technical problem.

- **Standard CC.3.5.9-10.I**  
  Compare and contrast findings presented in a text to those from other sources, etc.

**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 11-12**

- **Standard CC.3.5.11-12.G**  
  Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

- **Standard CC.3.5.11-12.H**  
  Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

- **Standard CC.3.5.11-12.I**  
  Synthesize information from a range of sources into a coherent understanding.

**INTEGRATE KNOWLEDGE & IDEAS**  
**GRADES 9-10**

- **Standard CC.3.6.9-10.D**  
  Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.

- **Standard CC.3.6.11-12.D**  
  Use technology, including the internet, to produce, publish, and update individual or shared writing products.

**RESEARCH**  
**GRADES 9-10-11-12**

- **Standard CC.3.6.9-10.F**  
  Conduct short and more sustained research to answer a question or solve a problem.

- **Standard CC.3.6.11-12.F**  
  Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.

- **Standard CC.3.6.9-10.G**  
  Draw evidence from informational texts to support analysis, reflection, and research.

**RANGE OF WRITING**  
**GRADES 9-10-11-12**

- **Standard CC.3.5.9-10.I** & **Standard CC.3.5.11-12.I**  
  Write routinely over extended time frames and shorter time frames for a
### RANGE OF READING
**GRADES 9-10-11-12**
Standard CC.3.5.9-10.
Standard CC.3.5.11-12.

By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

### PROFESSIONAL PRACTICES.

<table>
<thead>
<tr>
<th>900</th>
<th>901</th>
<th>Prepare and present a portfolio.</th>
</tr>
</thead>
<tbody>
<tr>
<td>902</td>
<td>Prepare and present a visual concept presentation.</td>
<td></td>
</tr>
<tr>
<td>903</td>
<td>Estimate time and and/or materials for a project.</td>
<td></td>
</tr>
<tr>
<td>904</td>
<td>RESERVED</td>
<td></td>
</tr>
<tr>
<td>905</td>
<td>Matte and mount works of art.</td>
<td></td>
</tr>
<tr>
<td>906</td>
<td>Participate in critiques of commercial art projects.</td>
<td></td>
</tr>
<tr>
<td>907</td>
<td>Explore current industry trends.</td>
<td></td>
</tr>
</tbody>
</table>

### CAREER CLUSTER:
**Arts, AV Technology and Communications Career Cluster**

(Choose Standards)

1-2-3-4-5-6

### PATHWAYS INCLUDE:
**Printing Technology Career Pathway**

(Choose Standards)

1-2-3

**Visual Arts Career Pathway**

(Choose Standards)

1-2-3

### NOTE:
Refer to the Common Career Technical Core Standards Booklet if you wish to add more Pathways, for your local area.

### KEY IDEAS/DETAILS
**GRADES 9-10-11-12**
Standard CC.3.5.9-10.
Standard CC.3.5.11-12.

Cite specific textual evidence, etc.

**TEXT TYPES AND PURPOSE**
**GRADES 9-10-11-12**
Standard CC.3.6.9-10.
Standard CC.3.6.11-12.

Write arguments focused on discipline specific content.

### CRAFT & STRUCTURE
**GRADES 9-10-11-12**
Standard CC.3.5.9-10.
Standard CC.3.5.11-12.

Determine the central ideas or conclusions of a text; etc.

### PRODUCTION & DISTRIBUTION OF WRITING
**GRADES 9-10-11-12**
Standard CC.3.6.9-10.
Standard CC.3.6.11-12.

Produce clear and coherent writing...appropriate to task, purpose, and audience.

### NUMBERS AND OPERATIONS
**Standard 2.1.HS.F.2**
Apply properties of rational and irrational numbers to solve real world or mathematical problems.

**Standard 2.1.HS.F.4**
Use units as a way to understand problems and to guide the solution of multistep problems.

**Standard 2.1.HS.F.5**
Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

**Standard 2.1.HS.F.6**
Extend the knowledge of arithmetic operations and apply to complex numbers.
<table>
<thead>
<tr>
<th>INTEGRATE KNOWLEDGE &amp; IDEAS</th>
<th>GRADES 9-10</th>
<th>GRADES 11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard CC.3.5.9-10.G</strong></td>
<td>Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).</td>
<td>Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.</td>
</tr>
<tr>
<td><strong>Standard CC.3.5.9-10.H</strong></td>
<td>Assess the reasoning in a text to support the author’s claim for solving a technical problem.</td>
<td>Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.</td>
</tr>
<tr>
<td><strong>Standard CC.3.5.9-10.I</strong></td>
<td>Compare and contrast findings presented in a text to those from other sources, etc.</td>
<td>Synthesize information from a range of sources into a coherent understanding.</td>
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</tbody>
</table>

**INTEGRATE KNOWLEDGE & IDEAS**

**GRADES 9-10**

**Standard CC.3.5.9-10.G**
Translate quantitative or technical information expressed in a text into visual form (e.g. a table or chart).

**Standard CC.3.5.9-10.H**
Assess the reasoning in a text to support the author’s claim for solving a technical problem.

**Standard CC.3.5.9-10.I**
Compare and contrast findings presented in a text to those from other sources, etc.

**INTEGRATE KNOWLEDGE & IDEAS**

**GRADES 11-12**

**Standard CC.3.5.11-12.G**
Integrate and evaluate multiple sources of information presented in diverse formats...to solve a problem.

**Standard CC.3.5.11-12.H**
Evaluate the hypotheses, data, analysis, and conclusions in a technical text, verifying the data when possible.

**Standard CC.3.5.11-12.I**
Synthesize information from a range of sources into a coherent understanding.

**RANGE OF READING**

**GRADES 9-10-11-12**

**Standard CC.3.5.9-10.J**
By the end of grades 9-10, AND 11-12, read and comprehend technical texts independently and proficiently.

**RANGE OF WRITING**

**GRADES 9-10-11-12**

**Standard CC.3.5.9-10.I** & **Standard CC.3.5.11-12.I**
Write routinely over extended time frames and shorter time frames for a range of tasks, purposes and audiences...etc.

**RESEARCH**

**GRADES 9-10-11-12**

**Standard CC.3.6.9-10.F**
Conduct short and more sustained research to answer a question or solve a problem.

**Standard CC.3.6.11-12.F**
Gather relevant information from multiple authoritative print and digital sources, following a standard format for citation.

**Standard CC.3.6.9-10.G**
Standard CC.3.6.11-12.G
Draw evidence from informational texts to support analysis, reflection, and research.