Big Ideas/Key Concepts: Safety in Shop and Computer Labs
Students will pass with 100% accuracy a written and performance safety examination covering tools, equipment, standards, rules, and regulations specific to the course of study. Students will also recognize the importance of a “greener” environment.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Student Friendly “I Can” Statements</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 1.0 Students will take personal responsibility for the safety of themselves, their coworkers, and bystanders and perform safety examinations and maintain safety records.</td>
<td>I can demonstrate and comprehend the importance of a safe working environment by passing the safety test with 100%. I can select appropriate tools, technology, machinery, equipment, and materials for a given assignment. I can identify potential hazards related to the use of tools and equipment. I can follow the rules and regulations to comply with personal and lab safety standards. I can maintain a portfolio with proper organization and sections relating to safety in the shop and computer labs. I can understand the importance of conserving energy. I can practice the “Reduce, Reuse, Recycle” in and out of the classroom.</td>
<td><a href="http://www.OSHA.gov">www.OSHA.gov</a> General safety information from various textbooks Safety notes, power point, Prezi, Programs Rubric handout on requirements of a portfolio</td>
</tr>
</tbody>
</table>
### Big Ideas/Key Concepts: Student Organization
Students will demonstrate leadership, citizenship, and teamwork skills required for success in the classroom, school, community, and workplace.

<table>
<thead>
<tr>
<th>Standards</th>
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</table>
| Standard 2.0  
Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace. | I can participate in a student organization such as TSA or Skills/USA.  
I can be an active team member of ACE Mentoring.  
I can be an active and productive team member.  
I can apply problem-solving techniques to make decisions.  
I can be responsible for my actions. | www.Tsa.org  
www.Skillsusa.org  
www.Acementor.org |

### Big Ideas/Key Concepts: Drawing Instruments and Techniques
Students will integrate reading, writing, math, and science skills and understand the impact of academic achievement in the work place.

<table>
<thead>
<tr>
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</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can read, understand, and comprehend chapter questions pertaining to the assignments.  
I can learn, apply, and convert full scaled objects to reduced scales using reduction scales found on the architecture scale. | Chapter 4: Architecture Residential Drafting and Design page 67  
Architecture Scale  
Architecture tools  
Paper |
<table>
<thead>
<tr>
<th>Standards</th>
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</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames.  
Standard 3.2  
Demonstrate advanced study skills.  
Standard 3.3  
Demonstrate and use written and verbal communication skills. | I can read, understand, and comprehend chapter questions pertaining to the assignments.  
I can identify different house designs and styles. | Chapter 2: Architecture Residential Drafting and Design page- 37 |

**Big Ideas/Key Concepts:** Basic House Design  
Integrate reading, writing, and communication to describe the four basic house designs.
Standard 3.4
Read and understand technical documents, such as regulations, manuals, reports, forms, graphs, charts, and tables.

Standard 3.8
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy.

**Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9**

**Big Ideas/Key Concepts: Room Planning – Sleeping Area and Bath Facilities**
Using various technical manuals and reports, mathematical principles, and green standards a home’s sleeping area and bath facilities can be designed.

<table>
<thead>
<tr>
<th>Standards</th>
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</thead>
</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can read, understand, and comprehend chapter questions pertaining to the assignments.  
I can identify different bathroom styles and fixtures found in bathrooms.  
I can sketch, design and graph my ideas of bathrooms on ¼” graph paper. | Chapter 7: Architecture Residential Drafting and Design page - 129  
¼” graph paper  
¼” Kitchen template |
| Standard 3.2  
Demonstrate advanced study skills. | | |
| Standard 3.3  
Demonstrate and use written and verbal communication skills. | | |
| Standard 3.4  
Read and understand technical documents, such as regulations, manuals, reports, forms, | | |
graphs, charts, and tables.

Standard 3.8
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy.

Standard 4.1
Create and print two-dimensional scale drawings.

**Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9**

**Big Ideas/Key Concepts: Room Planning – Service Area**
Using various technical manuals and reports, mathematical principles, and green standards a home’s service area can be designed.

<table>
<thead>
<tr>
<th>Standards</th>
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</thead>
</table>
| Standard 3.1
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can read, understand, and comprehend chapter questions pertaining to the assignments. I can identify the different kitchen styles. I can describe fixtures found in bathrooms. I can sketch, design and graph my ideas of kitchens on ¼” graph paper. I can sketch appropriate one- and two-car garages with turnarounds. I can explain the kitchen work triangle. | Chapter 9: Architecture Residential Drafting and Design page-189 ¼” graph paper ¼” Kitchen template |
| Standard 3.2
Demonstrate advanced study skills. |  |
| Standard 3.3
Demonstrate and use written and verbal communication skills. |  |
| Standard 3.4
Read and understand technical documents, such as regulations, manuals, reports, forms, |  |
graphs, charts, and tables.

Standard 3.8
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy.

Standard 4.1
Create and print two-dimensional scale drawings.

Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9

<table>
<thead>
<tr>
<th>Big Ideas/Key Concepts: Room Planning – Living Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using various technical manuals and reports, mathematical principles, and green standards a home’s living area can be designed.</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Standard 3.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames.</td>
<td>I can read, understand, and comprehend chapter questions pertaining to the assignments.</td>
<td>Chapter 8: Architecture Residential Drafting and Design page-149</td>
</tr>
<tr>
<td>Standard 3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate advanced study skills.</td>
<td>I can distinguish between a patio and deck.</td>
<td></td>
</tr>
<tr>
<td>Standard 3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate and use written and verbal communication skills.</td>
<td>I can describe a good foyer design.</td>
<td></td>
</tr>
<tr>
<td>Standard 3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read and understand technical documents, such as regulations, manuals, reports, forms,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
graphs, charts, and tables.

Standard 3.8
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy.

**Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9**

**Big Ideas/Key Concepts: Chapter 17 Fireplaces, Chimneys, and Stoves**
Using various technical manuals and reports, mathematical principles, and green standards a home’s fireplace and chimney can be designed.

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</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can read, understand, and comprehend chapter questions pertaining to the assignments. | Chapter 17: Architecture Residential Drafting and Design page-369 |
| Standard 3.2  
Demonstrate advanced study skills. | I can describe the difference parts of a fireplace. | |
| Standard 3.3  
Demonstrate and use written and verbal communication skills. | | |
| Standard 3.4  
Read and understand technical documents, such as regulations, manuals, reports, forms, graphs, charts, and tables. | | |
| Standard 3.8  
Research, recognize, and understand the | | |
interactions of the environment and green issues as they relate to the course work and to a global economy.

**Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9**

**Big Ideas/Key Concepts: Graph Paper Floor Plan**
Using various technical manuals and reports, mathematical principles, and green standards a house floor plan can be designed.

<table>
<thead>
<tr>
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</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can conceive, design, and create a floor plan following assignment guidelines.  
I can organize bathrooms and kitchen designs incorporated in my floor plan. | Architecture Residential Drafting and Design textbook  
Bathroom and Kitchen templates |
| Standard 3.2  
Demonstrate advanced study skills. | | ¼” graph paper  
Requirements of floor plan |
| Standard 3.3  
Demonstrate and use written and verbal communication skills. | | |
| Standard 3.4  
Read and understand technical documents, such as regulations, manuals, reports, forms, graphs, charts, and tables. | | |
| Standard 3.8  
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy. | | |
Standard 4.1  
Create and print two-dimensional scale drawings.

Common Core standard: 1, 2, 3, 4, 5, 6, 7, 9

Big Ideas/Key Concepts: AutoCAD Floor Plan  
Using various technical manuals and reports, mathematical principles, and green standards a house floor plan can be designed.

<table>
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</table>
| Standard 3.1  
Be responsible for accomplishing classroom assignments and workplace goals within accepted time frames. | I can conceive, design and create a floor plan following the given guidelines of the assignment.        | AutoCAD tutorial                                                         |
| Standard 3.2  
Demonstrate advanced study skills.                                        | I can organize bathrooms and kitchen designs incorporated in my floor plan.                          | ITunes U videos- URL is found on SharePoint page of teachers participating. |
| Standard 3.3  
Demonstrate and use written and verbal communication skills.             |                                                                                                      | Instructional Videos on the public drive                                  |
| Standard 3.4  
Read and understand technical documents, such as regulations, manuals, reports, forms, graphs, charts, and tables. |                                                                                                      | Architecture Residential Drafting and Design textbook                    |
| Standard 3.8  
Research, recognize, and understand the interactions of the environment and green issues as they relate to the course work and to a global economy. |                                                                                                      | ¼” graph paper design that student created                               |
|                                                                                       |                                                                                                      | Requirements of floor plan                                              |


Standard 4.1  
Create and print two-dimensional scale drawings.  

**Common Core standard:** 1, 2, 3, 4, 5, 6, 7, 9

**Big Ideas/Key Concepts:** Storyboard Project  
Create a storyboard detailing interior designs using professional standards and practices.

<table>
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<tbody>
<tr>
<td>Standard: 6.1, 6.2, 7.1, 7.2, 7.3</td>
<td>I can locate all my samples and create a layout on my foam board to describe what the interior of my floor plan will become.</td>
<td>Floor plan</td>
</tr>
</tbody>
</table>
| Standard 6.1  
Create a research project based on different areas of the drafting and design industry. | I can visually show the interior of my home through the storyboard. | Rubrics for the storyboard requirements. |
| Standard 6.2  
Create a detailed presentation based on one specific area from the research. | | |
| Standard 7.1  
Create a design project based on different areas of the drafting and design industry. | | |
| Standard 7.2  
Create detailed working drawings based on professional standards. | | |
| Standard 7.3  
Present design and working drawings to a group of peers and/or members of the profession. | | |
**Big Ideas/Key Concepts: Portfolio**
Students will develop advanced study skills that can assist to demonstrate personal and analytical competencies

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<tr>
<td>Standard 2.0</td>
<td>I can effectively present a self-evaluation of my progression in the engineering, architecture, and design fields.</td>
<td>Three ring binder</td>
</tr>
<tr>
<td>Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.</td>
<td>I can complete the assignments.</td>
<td>Sheet protectors</td>
</tr>
<tr>
<td>Standard 3.2</td>
<td>I can organize and maintain a professional 9-week portfolio demonstrating my assignments.</td>
<td>Printer paper</td>
</tr>
<tr>
<td>Develop advanced study skills.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Common Core standard: 10</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>