Grades 11-12 Advanced Drafting and Design-Inventor, Quarter 2, Revised 2013

**Big Ideas/Key Concepts: Section Drawings**  
Students will create and print two- and three-dimensional scale drawings and orthographic projections using Inventor.

<table>
<thead>
<tr>
<th>Standards</th>
<th>Student Friendly “I Can” Statements</th>
<th>Resources</th>
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| Standard 4.1  
Students will create and print two-dimensional scale drawings. | I can understand what the difference of full and half sections. | Textbooks and handouts of assigned drawings.  
Chapter 10 page 315 |
| Standard 4.2  
Student will create and print drawings of three-dimensional objects including parallel extrusion, perspective extrusion, and three-dimensional isometrics. | I can decide which view the assignment is asking me to draw and decide where to put the correct section style. | Basic Technical Design drawings as assigned by teacher  
Live parts that teacher has assigned.  
I Tunes U videos- URL is found on SharePoint page of teachers participating. |
| Standard 4.3  
Create and print engineering drawings of complex objects requiring multiple sectional views. | I can, using my calipers, measure, draw and determine what the sections of the live part are needed and explain why. | Instructional Videos on the public drive |

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

**Big Ideas/Key Concepts: Live Drawing Sections**  
Students will create and print two- and three-dimensional scale drawings and orthographic projections using Inventor.

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| Standard 4.1  
Students will create and print two-dimensional scale drawings. | I can understand the difference of full and half sections. | Live parts that teacher has assigned  
Drawings as assigned by teacher |
| | I can decide which view the assignment is | |
**Standard 4.2**  
Student will create and print drawings of three-dimensional objects including parallel extrusion, perspective extrusion, and three-dimensional isometrics.

**Standard 4.3**  
Create and print engineering drawings of complex objects requiring multiple sectional views.

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

**Big Ideas/Key Concepts: Portfolio**  
Students will develop advanced study skills that can assist to demonstrate personal and analytical competencies

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| Standard 2.0  
Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.  
Standard 3.2  
Develop advanced study skills. | I can effectively present a self-evaluation of my progression in the engineering, architecture, and design fields.  
I can complete the assignments.  
I can organize and maintain a professional 9 week portfolio demonstrating my assignments. | 3-ring binder  
Sheet protector  
Computer  
Printer |

I can, using my calipers, measure, draw and determine what the sections of the live part are needed and explain why.

I can manipulate my drawings into a printed draft that will have the correct placement of the views, dimensions and sections need.