Name Cesar Alvarez Course: 794 Drafting & CAD	Date: December 2014
Unit Title: Introduction to Mechanical Drawing	**Length of Unit: 4 weeks**
Understandings: Students will understand that…	**Essential Questions:**
• Careers • Alphabet of lines • Equipment – T-square, triangles, scale, curves, compass • Geometric shapes – square, circle, triangle, rectangle, etc • Sketching, Numbering, Lettering	1. Why do we do drafting? 2. How do engineers communicate?

Create: What are the student objectives?
Reflective Questions:

- How do the student objectives support the student in meeting the Waterbury and State Standards?
- How do the student objectives reflect varied learning styles?

Wilby High School 21st Century Student Expectations and Codes

Academic	Social	Civic
EPS = Effective Problem Solver	CCW=Collaborative/Cooperative Worker	CC= Community Contributor
EW = Effective Writer	RS = Respectful Person	
SDL= Self-Directed Learner		
ER = Effective Reader		

Standards	Specific Learning Objectives	Wilby High School 21st Century Student Expectations -see code above
WTBY Curriculum Objectives- based on CSDE Standards	• **To gain knowledge of Careers in CAD** • **To demonstrate knowledge of the different lines in a mechanical drawing and when to use them** • **To show knowledge of the tools used in mechanical drafting and how and when to use them** • **To demonstrate knowledge of geometrical shapes used in drawing** • **To show skills and knowledge in sketching, numbering and lettering a drawing**	SDL EPS EPS EPS EPS
Literacy Objectives aligned to the CCSS	Reading material in Chapters	
Numeracy Objectives aligned to the CCSS	Dimensioning drawings and scaling	

Performance Based Assessment: Extended written product: essay, lab report, research paper Visual Product: power point show, mural, movie Oral performance: Oral report, dialogue, debate Demonstration: skill performance in Phys. Ed Reflective journal or learning log Self-Assessment using criteria	Students will be able to: • Discuss careers in Drafting • Indentify on test various drafting lines • Use and apply to drawings the different tools of the trade • Draw and dimension geometrical shapes
Traditional Assessment: Selected Response format (Multiple Choice, True-False Quizzes and Tests) Written-oral responses to academic prompts (short answer format) Homework	Vocabulary quizzes on Friday Power Point Projects Drawing Quizzes

Technology/Research Objectives	Demonstrate proficiency in using CAD software	

Respond:

Reflective Questions:

- How do the assessments enable students to apply their knowledge and skills to the real world?
- How do the assessments enable students to show their understanding orally and/or in writing?
- How do the assessments reflect varied learning styles?

Instructional Design:

Reflective Questions:

How does your instructional plan for the unit allow students to build background knowledge, identify new information, construct meaning and apply information learned in authentic situations?

1. Worksheet for Career Powerpoint

2. Worksheet and notes for drawing lines

3. Worksheet and notes for drafting tools

4. Reading book articles and drawing of geometric shapes

5. Worksheets for lettering and drawing application

6. Worksheet for numbering and drawing application

7. Worksheet for sketching and drawing application