

SPANISH FORK HIGH SCHOOL 2014-2015

DONS Learning Targets for

Architectural Design 1

I CAN understand the Design Technology profession.

- I CAN identify and understand Technical Design and how it relates to occupations and opportunities.
- I CAN Display and understand professional attitude and how it relates to employability.

I CAN demonstrate sketching techniques.

- I CAN demonstrate the use of horizontal, vertical, and inclined lines.
- I CAN demonstrate the use of arcs and circles as they are drawn to proportionate radius or diameter.
- I CAN demonstrate the use of lines as they are drawn according to the alphabet of lines.
- I CAN develop sketches with paper, pencil, and eraser without the use of a straight edges or templates.
- I CAN produce a one-view sketch of an object using proportional relationships.
- I CAN apply basic dimensioning practices in accordance with ANSI standards.

I CAN understand and demonstrate how to create a drawing using alphabet of lines.

- I CAN understand and demonstrate the recommended thickness of lines.
- I CAN understand and demonstrate the correct use of line types.
- I CAN demonstrate the usage of line types to complete drawings to ANSI standards.

I CAN understand and demonstrate use of Computer Aided Design technology skills.

- I CAN use basic measuring systems which include scales, fractions, decimals, Cartesian coordinates, polar and relative relations.
- I CAN demonstrate and use correct annotation to drawings.
- I CAN prepare and manipulate title blocks for different design technology formats
- I CAN reproduce original drawings using different methods.

I CAN create drawings using Computer Aided Design software.

- I CAN demonstrate accuracy and exactness when working with geometric shapes.
- I CAN develop a complete multi-view drawing.
- I CAN develop pictorial drawings such as isometric and oblique.
- I CAN preform a drawing set-up including units, borders, paper size, and standards
- I CAN use and control accuracy enhancement tools (snap, grid, and positioning methods).
- I CAN identify and use appropriate symbol libraries.

I CAN demonstrate and understand architectural design fundamentals.

- I CAN understand the historical influences the helped shape modern designs.
- I CAN recognize and describe the elements of a contemporary dwelling.
- I CAN discuss current trends in architecture.
- I CAN list family needs that's should be considered when planning a dwelling.

I CAN understand and apply architectural room planning for the living, sleep, and service areas.

- I CAN discuss and apply factors important in the design of bedrooms, bathrooms, and closets.
- I CAN discuss and apply factors important in the design of living room, entryways, foyers, and porches.
- I CAN discuss and apply factors important in the design of kitchens clothes care, and garages.
- I CAN discuss home construction costs per square foot. Discuss cost per type of construction, affordability, and the cost of amenities.

I CAN understand how to design a residential floor plan.

- I CAN list the information required on a typical floor plan.
- I CAN represent typical materials using standard architectural symbols.
- I CAN design and draw a residential floor plan using the accepted symbols and techniques.
- I CAN discuss and apply accessibility requirements for good functional utility .

I CAN understand how to analyze, calculate, and design footings/foundations.

- I CAN list the major considerations when designing a footing roe a residential foundation.
- I CAN analyze a typical floor plan to determine the appropriate foundation.
- I CAN create a footing/foundation plan appropriate for my floor plan.

I CAN understand how to lay out a exterior elevations.

- I CAN list feature that should be included on an exterior elevation.
- I CAN identify the dimensions commonly shown on elevations.
- I CAN illustrate symbols that are commonly used on elevations.
- I CAN draw a typical elevation and demonstrate proper technique.

I CAN understand how to layout wall construction.

- I CAN name and label components of a typical wall construction.
- I CAN draw a typical wall section and cross-sections.

I CAN understand how to complete a window/door schedules.

- I CAN draw a window schedule that would include size, make, material, and type of glazing.
- I CAN draw a door schedule that would include size, style, type of lockset, special features, and jamb size..

I CAN understand and apply professional development skills in the workplace .

- I CAN understand the need for professional development in school and the workplace.
- I CAN understand the need for leadership skills.
- I CAN understand the need for career planning.
- I CAN understand the importance of employability skills and workplace habits.

