

TECHNICAL INTRODUCTION TO COMPUTER AIDED DRAFTING

STUDENT GRADE RECORD

Career & Technical Education

WINDHAM SCHOOL DISTRICT

Student Name _____

TDCJ # _____

Instructor Name _____

Unit _____

| Course Outline Modules | Windham Module Test | Module Competency Rating |
|--|---------------------|--------------------------|
| 1. CTE Orientation | | |
| 2. CTE Office Safety and Health | | |
| 3. Drafting Theory and Standards | | |
| 4. Introduction to Computers | | |
| 5. Introduction to Computer Aided Drafting | | |
| 6. Orthographic Views | | |
| 7. Dimensioning | | |
| 8. Pictorial Views | | |
| 9. Section Views | | |
| 10. Auxiliary Views | | |
| 11. Final Project | | |

| | | |
|--|-------|-----|
| WSD Certificate | Y / N | |
| If I were hiring for this position, I would: (check one) <input type="checkbox"/> 0-No recommendation at this time. (Cannot be used for Completers.) <input type="checkbox"/> 1-Hire this person and look no further. <input type="checkbox"/> 2-Interview this person along with other applicants <input type="checkbox"/> 3-Not hire this person. | | |
| Complete only if student attempted industry certification. | | |
| Name of Industry Certificate | Code | P/F |
| None | | |

| | | | | |
|--------------------------------------|--|--------|---|-----------|
| <i>Windham Module Test Average</i> | | x . 75 | a | Completer |
| <i>Windham End of Course Exam</i> | | x . 25 | b | |
| <i>Windham Module Score (a + b=)</i> | | | | 70+ |
| <i>% Competencies Completed</i> | | | | 70+ |
| <i>Module Competency Rating</i> | | | | 2.7+ |

Instructor Signature

Date

TECHNICAL INTRODUCTION TO COMPUTER AIDED DRAFTING

STUDENT PROGRESS RECORD

RECORDING DIRECTIONS

SKILL RATING: Post the student's competency rating for each skill performed.

MODULE TEST SCORE: Enter the student's test score for the module.

MODULE RATING: Use the following scale to determine module rating:

[4] **Skilled**- Can perform competencies independently with no supervision.

[3] **Moderately Skilled**- Can perform competencies with limited supervision.

[2] **Limited Skill**- Requires instruction and close supervision to perform competencies.

[1] **Unskilled**- Exposed to concept, but no hands-on experience.

Note: When evaluating a student's module rating, skill performance should be given priority.

1. CTE Orientation

Teacher Student

Initial Initial

- ____ | ____ 1. Identify employment opportunities related to the course.
- ____ | ____ 2. Identify the number of classroom hours a student must attend to be considered as a completer.
- ____ | ____ 3. Identify the industry-recognized certification.
- ____ | ____ 4. Identify course expectations including:
- Working conditions
 - Attendance expectations
 - Instructor's expectations

2. Office Safety and Health

Test Score _____

Minimum 100% Required

____ *Module Rating (4,3,2,1)*

- ____ 1. Apply general safety to the school and workplace.
- ____ 2. Interpret Material Safety Data Sheets.

3. Drafting Theory and Standards

Module Test Score _____

____ *Module Rating (4, 3, 2, 1)*

- ____ 1. Identify types of drawing media and related drafting materials.
- ____ 2. Identify basic measuring systems.
- ____ 3. Make changes on drawing annotations.
- ____ 4. Identify and use correct line styles and weights.
- ____ 5. Create freehand technical sketches.
- ____ 6. Identify and use appropriate standard symbols.
- ____ 7. Demonstrate drafting fundamentals.
- ____ 8. Describe necessary Personal Characteristics for a Successful drafter.
- ____ 9. Identify technical drawings.

4. Introduction to Computers

Module Test Score _____

____ *Module Rating (4, 3, 2, 1)*

- ____ 1. Explain hardware and software requirements.
- ____ 2. Explain computer requirements for computer aided drafting software.
- ____ 3. Describe Ergonomics.
- ____ 4. Navigate the Windows desktop.
- ____ 5. Identify desktop essentials.
- ____ 6. Launch computer aided drafting program.
- ____ 7. Demonstrate proper care of computer equipment.
- ____ 8. Operate and adjust input devices.
- ____ 9. Operate and adjust output devices.
- ____ 10. Use storage media properly.
- ____ 11. Boot up and shut sown workstation properly.
- ____ 12. Adjust monitor appropriately.
- ____ 13. Demonstrate awareness of information services.
- ____ 14. Use directory structure to find, save, and manage files.
- ____ 15. Properly start and exit software programs.
- ____ 16. Demonstrate proper file maintenance add backup procedures.
- ____ 17. Use shortcut icons to speed operation.
- ____ 18. Import and export data files.
- ____ 19. Use computer aided drafting program help.
- ____ 20. Save drawings to storage devices.

5. Introduction to Computer Aided Drafting

Module Test Score _____

____ *Module Rating (4, 3, 2, 1)*

- ____ 1. Use text and graphics screens effectively.
- ____ 2. Use keyboard, mouse menus, pull down menus, dialog boxes, and tool bar menus.
- ____ 3. Properly execute computer aided drafting program system variables and commands.
- ____ 4. Use command in file pull down menus.

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- _____ 5. Use proper scale, units of measurement and drawing size conventions.
- _____ 6. Use appropriate linear and angular units on drawings
- _____ 7. Use Cartesian Coordinate System (Absolute, Relative, and Polar).
- _____ 8. Use LINE command and its options: Undo, Close, and Continue.
- _____ 9. Apply CIRCLE command and its 6 options.
- _____ 10. Apply ARC command and its 6 options.
- _____ 11. Use FILLET command and its 3 options.
- _____ 12. Use CHAMFER command and its 2 options.
- _____ 13. Apply STYLE command and its 8 options.
- _____ 14. Apply TEXT command and its 3 options.
- _____ 15. Use point, window, crossing, fence and window selection mode.
- _____ 16. Effectively use ZOOM toolbar and commands for maximum precision.
- _____ 17. Effectively use PAN command and Intellimouse button for display manipulation.
- _____ 18. Use VIEW command and its options.
- _____ 19. Use GRID and SNAP commands.
- _____ 20. Correctly apply line type and LT Scale commands to drawings.
- _____ 21. Correctly apply Color commands to drawings.
- _____ 22. Correctly apply Layer command and its options.
- _____ 23. Apply Object Snap Modes including Center, Endpoint, From, Apparent, Insertion, Midpoint, Nearest, etc.
- _____ 24. Identify object snap points for basic line types.
- _____ 25. Use Erase command.
- _____ 26. Use the U, UNDO, and REDO commands.
- _____ 27. Use the REDRAW and REGEN commands
- _____ 28. Use the BREAK command and its options.
- _____ 29. Use the TRIM command and its options.
- _____ 30. Use the EXTEND command and its options.
- _____ 31. Use the OFFSET command and the options DISTANCE and THRU.
- _____ 32. Use the DIVIDE command and its option BLOCK.
- _____ 33. Use the MEASURE command and it option BLOCK.
- _____ 34. Use the CHANGE command and its 2 options.
- _____ 35. Use the MOVE command.
- _____ 36. Use the COPY command and the option MULTIPLE.
- _____ 37. Use the ARRAY command and its options RECTANGULAR and POLAR.

- _____ 38. Use the ROTATE command and its option REFERENCE.
- _____ 39. Use the MIRROR command.
- _____ 40. Use the STRETCH command to modify drawings.
- _____ 41. Use the SCALE command and its option REFERENCE.
- _____ 42. Use the control codes to insert text.
- _____ 43. Use the POLYGON command and its 2 options.
- _____ 44. Use the ELLIPSE command.
- _____ 45. Use B-HATCH, HATCH, and OPTION commands.

6. Orthographic View

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Identify, create, and place appropriate orthographic views.
- _____ 2. Draw 3 view orthographic drawings from sketches and isometric illustrations.
- _____ 3. Draw exploded view assembly drawings.

7. Dimensioning

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Apply dimensioning rules correctly
- _____ 2. Use correct line trimmers.
- _____ 3. Dimension objects.
- _____ 4. Dimension complex shapes.
- _____ 5. Dimension features from center line.
- _____ 6. Dimension theoretical point of intersection.
- _____ 7. Use appropriate dual dimension practices.
- _____ 8. Use appropriate size and location dimension practices.
- _____ 9. Use various dimensioning styles.
- _____ 10. Use tolerance dimensioning when appropriate.
- _____ 11. Use the EXIT, REDRAW, and UNDO dimensioning tools.
- _____ 12. Use the linear dimensioning commands HORIZONTAL, VERTICAL, ALIGNED, ROTATED, CONTINUE, and BASELINE.
- _____ 13. Use the dimensioning commands ANGULAR, DIAMETER, RADIUS, and LEADER.
- _____ 14. Use the DDIM, STYLE, STATUS, and SAVE dimensioning commands.

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- _____ 15. Set dimension variables using both the command line and dialogue box methods.
- _____ 16. Use the dimensioning commands VARIABLES, RESTORE, and OVERRIDE.
- _____ 17. Use the dimension commands HOMETEXT, NEWTEXT, OBLIQUE, TROTATE, UPDATE and CENTER.
- _____ 18. Use the control codes to insert text.

8. Pictorial View

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Identify and create axonometric drawings.
- _____ 2. Identify and create oblique drawings
- _____ 3. Identify and create perspective drawings.

9. Section View

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Identify appropriate section view.
- _____ 2. Create appropriate section views.
- _____ 3. Place appropriate section views.

10. Auxiliary View

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Identify appropriate auxiliary views
- _____ 2. Create appropriate auxiliary views.
- _____ 3. Place appropriate auxiliary views.

11. Final Project

Module Test Score _____

Module Rating (4, 3, 2, 1)

- _____ 1. Use computer aided drafting software to establish a Selected Topic.
- _____ 2. Develop and edit the following drawings:
 - a. Cover Sheet
 - b. Orthographic part drawings / Bill of Materials
 - c. Orthographic / Elevation Assembly
 - d. Isometric Assembly
 - e. Make binder / sets for shop

_____ Number of Skills Completed ÷

108 Number of Skills on SPR =

_____ % of Skills Completed

Conference

Date: _____ Hours in class: _____

Comments:

_____ Teacher initial: _____ Student initial: _____