

COURSE SYLLABUS

Pipe Drafting

DFTG 2323 Number

<u>2 - 4 - 3</u> Lecture - Lab - Credit

> Basic CAD Prerequisite

This syllabus has been reviewed and is current on the date indicated.

Prepared By

Date

Justin Price

8/05/2015

Reviewed By

Caleb Steed Division Director 8/06/2015 Date

I. Instructor Information

Name: Justin Price	Phone: 325-734-3632
Campus Office: 415	E-mail: Justin.Price@tstc.edu
Office Hours: Mon-Fri 2pm - 4 pm	Advisement Hours: Mon-Fri 8am – 5pm
Program Chair/ Director: Caleb Steed	Program Chair/Director Email: Caleb.Steed@tstc.edu

II. Class Times, Location

Web/Hybrid Wed. 10:00am-11:55am, 224 Abilene, 210 Pevehouse Sweetwater, and 118 Brownwood

III. Program Outcomes

- A. Graduates are able to demonstrate competency in producing numerous drawings and projects using the commands of computer aided drafting design software.
- B. Successful graduates will demonstrate competency in producing drawings using industry drawing standards to demonstrate their knowledge of these standards.
- C. Graduates have acquired competency in producing industry drawings and projects utilizing the basic and advanced productivity tools in computer-aided drafting.

IV. Course Description & Introduction

A study of pipe fittings, symbols, specifications and their applications to a piping process system. Creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics.

V. Learning Outcomes

The student will:

A. Identify and create drawings of foundations, structural supports, and process equipment B. Identify symbols and research specifications

C. Create bill of materials list

D.Use charts and standards

E.Create isometric drawings and calculate measurements for pipe fittings.

VI. Assessment Methods & Grading Policy

Lectures may consist of hands-on learning exercises. Completed assignments are due on or before the date specified. The submission link closes on the due date & time specified for the unit. Students must successfully pass both validations in order to pass this course. No late work accepted. There is a 10% professionalism grade for this course which will show up weekly. The professionalism will cover coming to labs, turning work on time, being courteous, and treating others with respect. At any point during the semester if a student's grade drops to 75 or below, student will have to come in 2 hours a week for mandatory office hours for the remainder of the semester.

Grade	Percent	Description	Grade Points
А	90-100	Excellent/Superior Performance Level	4
В	80-89	Above Required Performance Level	3
С	70-79	Minimum Required Performance Level	2
D	60-69	Below Required Performance Level	1
F	Below 60	Failure to meet Performance Requirements	0
W		Withdrawal	0
CR		Credit	0
AUD		Audit of Course	0
See College Catalog for complete descriptions.			

Grading Policy Disclaimer: Grades based on Skills Validation will be calculated on a Pass / Fail matrix.

Out of the Total Number of Validations in the Course:

> ²/₃ Validation Rating of Accomplished = A

 $\frac{1}{3} - \frac{2}{3}$ Validation Rating of Accomplished = B

< ¹/₃ Validation Rating of Accomplished = C

A Single Validation Rating of Less than Competent = F

DFTG 1305 grading is computed as follows:

Discussion Questions	5%
Activities	5%
Professionalism	10%
Validations	20%
Drawings	60%

VII. Textbook/Reference Materials

Title: Process Pipe Drafting 4th Ed. Author: Terence M. Shumaker Publisher: Goodheart/Wilcox ISBN: 1590702476

VIII. Additional Resources & Supplies

Quantity	Item Description	
1	Internet Connection	
1	Laptop (With minimum requirements of the following)	
	• Intel Xeon E3 or Core i7 or equivalent 3.0 GHz or grater	
	• 4GB 1333 MHz DDR3 SDRAM (minimum)	
	• 8GB Ram or More (preferred)	
	• DVD +/-RW	
	• 15.6"diagonal LED backlit HD + anti-glare (1600 + 900)	
	 Microsoft Direct3D 11 or capable graphics card or higher 	
	• Wireless LAN	
	• Genuine Windows 7,8, or 8.1	
	 3 Year Manufacturer Warranty *** CAD software not compatible with Apple Operating system so please choose another computer that runs this system. Headset (used when listening to videos to not disturb others, not required) 4 GB memory stick Software for the CAD program will be provided through free student downloads For learning purposes only 	

IX. Class Participation Policy & Student Conduct

Texas State Technical College expects students to participate in classroom activities so that learning objectives of the course can be accomplished. Students who fail to meet participation expectations may be promptly dropped from the course. Participation guidelines are as follows:

1. Students are required to complete all assigned reading and homework prior to attending class.

2. Students are required to actively participate in all class activities including group work, projects, etc.

3. Students are required to turn-in all assignments on time and take examinations as scheduled.

learning objectives of the course can be accomplished. Students who fail to meet participation

expectations may be promptly dropped from the course. Lectures: Important material from the

text and outside sources will be covered in online videos. Students should plan to take careful

notes since some of the material will not be covered in the textbook.

Assignments: Review Assignments, class activities, and special projects will be periodically assigned to reinforce the material being taught.

All work turned in must be your own. Any work turned in represented as your own, and later determined that it is not your work, will be considered plagiarism. The punishment for plagiarism will be removal from the course with a grade of F and possible removal from the program and/or college.

X. Safety

• Campus building occupants are required to evacuate buildings when a fire alarm activates. Alarm activation or announcement requires exiting and assembling outside.

- Familiarize yourself with all exit doors of each classroom and building you may occupy while receiving instructions. The nearest exit door may not be the door you used when entering the building.
- Students requiring evacuation assistance should inform the instructor during the first week of class.
- In the event of evacuation, follow the faculty's or class instructor's instructions.
- **Do Not** re-enter a building unless given instructions by the Fire Department, Campus/Local Police, or Fire Prevention Services.

XI. Special Needs

If you have a documented disability that will impact your work in this class, please contact the ADA Coordinator, so that appropriate arrangements for your accommodations can be made. The counselor on your campus can assist you in this process. In accordance with the federal law, a student requesting accommodations must provide documentation of his/her disability to the ADA Coordinator. For more information call (325) 236-8292 or email amy.freeman@tstc.edu.

XII. Course Schedule

Notice: The assignments and due dates are subject to change at the instructor's discretion. Assignments, activities, and discussions are due by 10 pm on Mondays. See Moodle for assignments and instructions.

Unit 1- Week 1: Overview of Pipe Drafting
Unit 2- Week 2: Pipe and Fittings
Unit 3- Week 3: Pipe and Fittings
Unit 4- Week 4: Valves and Instrumentation
Unit 5- Week 5: Valves and Instrumentation
Unit 6 – Week 6: Pumps, Tanks, Vessels, and Equipment – Mid-term Validation
Unit 7 – Week 7: Pumps, Tanks, Vessels, and Equipment
Unit 8 - Week 8: Flow Diagrams
Unit 9 - Week 9: Flow Diagrams
Unit 10 - Week 10: Piping plans and Elevations
Unit 11 - Week 11: Piping plans and Elevations
Unit 12 - Week 12: Notes, Abbreviations, Revisions, and Piping Isometrics
Unit 13 - Week 13: Notes, Abbreviations, Revisions, and Piping Isometrics
Unit 14 - Week 14: Piping Isometrics - End of term Validation
Unit 15 - Week 15: Piping Spools

XIII. Instructor CV – Justin Price

Education			
Name of Institution	Degree Earned	Date Earned	
Texas State Technical College	Associate of Applied Science Drafting and Design	Fall 2009	
Industry, Teaching or Training, and Other (Examples: publications and memberships)			
Experience Relevant To Course			
Description of Experience Related To Course		Date Ended	
		Date Began	
MSB Security Design of security device placement for Airports, County, City, and State facilities		2007-2014	
Network Plumbing and Mechanical, Design of plumbing and gas systems for Jails, Hospitals, and		2008-2014	
Commercial buildings.			
Nicholas Consulting Group, Mechanical Design Coordinator Design of gas and oil equipment		2014- present	

Student Acknowledgement:

This is to acknowledge that I have received a copy of the syllabus for the course DFTG 2323 Pipe

Drafting. I understand that it is my responsibility to read and understand the syllabus and to abide

by the guidelines presented therein.

Student Printed Name

Signature

Date