



**TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS**

The Administrative- Master Syllabus is an administrative tool; it is **not intended to be distributed to students.** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of TVCC, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction. The Administrative-Master Syllabus will demonstrate that there is consistency and comparability in course offerings.

Course Title

Topographical Drafting

Course Prefix and Number

DFTG 2421

Department – Division

Drafting – Vocational/Technical

Course Type – select from one of the following categories.

- Academic General Education Course (from ACGM – but not in TVCC Core)
- Academic TVCC Core Course
- WECM Courses

Semester Credit Hours: Lecture Hours: Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	3

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description

A course in map drafting. Emphasis is given to plotting of surveyors of field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. The student will demonstrate an understanding of the transit, level, level rod, tape and associated surveying equipment and be able to identify and use topographical symbols. The student will demonstrate the proper use of math skills including trigonometry functions, and exhibit the ability to produce topographical drawings.

Prerequisites/co requisites

DFTG 1309 Basic Computer Aided Drafting

Topical Outline

- 1) Introduction to Civil Drafting Technology
 - a) Introduction to Civil Drafting
 - b) Schooling
 - c) Professional Organizations
 - d) Map Basics
 - e) Cartography
 - f) Types of Maps
- 2) Mapping Scales
 - a) Numerical Scales
 - b) Graphic Scales
 - c) Verbal Scales
 - d) Scale Conversion
 - e) Civil Engineer's Scale
 - f) Metric Scales
- 3) Mapping Symbols
- 4) Measuring Distance and Elevation
- 5) Surveying Fundamentals
 - a) The shape and size of the earth
 - b) Types of survey
 - c) Angular Measurements
 - d) Traversing
 - e) Global Positioning System
- 6) Location and Direction
- 7) Legal Descriptions
 - a) Metes and Bounds
 - b) Lot and Block
 - c) Rectangular Systems
 - d) Plot plans
- 8) Contour Lines
 - a) Characteristics
 - b) Types of lines

- c) From field notes
- d) Plotting contour lines
- 9) Profiles

Course Learning Outcomes

Upon completion of this course, the student will be able to:

- 1) Understand the use of various drafting and survey equipment and their proper care
- 2) Demonstrate an understanding and practical proficiency in the use of topographical symbols
- 3) Demonstrate proficiency in the use of civil engineering scales (measurement)
- 4) Demonstrate an understanding and practical proficiency in reading surveyors field notes
- 5) Demonstrate an understanding of the legal description of ownership maps and practical proficiency in drawing and detailing an ownership map
- 6) Demonstrate an understanding of survey field notes (legal description) for lease and ownership maps
- 7) Demonstrate an understanding of survey field notes for land maps (plats)
- 8) Demonstrate an understanding of survey field notes for contour development

<p>Relationship to General Education Outcomes – In addition to the core competencies, Trinity Valley Community College has established ten general education goals which specify knowledge and skills that students should gain from completing courses in the various component areas of the core curriculum. Information regarding curriculum and assessment as a means for the improvement of student learning through the general education component. (Select all that apply.)</p>
--

Mark with an "X"	General Education Outcome
	A. To communicate clearly and effectively in both oral and written English.
	B. To improve reading skills focused on comprehending, analyzing, interpreting, and evaluating printed materials.
	C. To understand mathematical information and utilize mathematical skills.
	D. To demonstrate qualitative and quantitative critical thinking skills.
	E. To understand and appreciate cultural and ethnic diversity.
X	F. To utilize computer based technology in accessing information, solving problems, and communicating.
	G. To recognize and evaluate artistic achievements in the visual and performing arts.

	H. To improve basic understanding of political, economic, and social systems.
	I. To demonstrate knowledge of the physical universe and living systems.
	J. To develop skills and strategies to become an engaged learner.

Required Text(s)

Civil Drafting Technology, Sixth Edition
Madsen & Shumaker
Pearson/Prentice Hall ©2007
ISBN: 0-13-171199-7

Optional Text(s)

NONE

Material/Technology to be supplied by the student.

Optional USB Flash drive for back ups

Course Requirements/Grading System – describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course; not intended to restrict the individual nature by which each faculty member who teaches the course determines course requirements and final student performance, but should offer consistency within reason for all sections taught for those departments without a standardized format.

Lab Assignments 70%
Final Project 20%
Final Exam 10%
 100%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by	Signature	Date
Department Head	Signature	Date
Division Chair	Signature	Date
Vice President	Signature	Date