



Purpose: 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 Wharton County Junior College, 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.

Course Title - Introduction to Surveying
Course Prefix and Number - SRVY1401
Department - Engineering Design

Division - Technology & Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture hours# : Lab/other hours #
4:3:3

Equated Pay hours for course - $3 + (3 \times .5) = 4.5$

Course Catalog Description - An overview of the surveying profession. The history of surveying and its impact on the world. Review of the mathematics used in surveying. Introduction to basic surveying equipment with emphasis on measurements. Instruction on surveying procedures and the limitations of errors. Calculation to determine precision and error of closure.

List Lab/ Other Hours
Lab Hours 3
Clinical Hours
Practicum Hours
Other (list)

Prerequisites/Co requisites - DFTG1493

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

Prepared by Jo Ann Lurker	Signature JALurker	Date 10-24-11
Department Head Jo Ann Lurker	Signature JALurker	Date 10-24-11
Division Chair Stephanie Dees	Signature SDees	Date 10-24-11
Vice President of Instruction or Dean of Vocational Instruction Leigh Ann Collins	Signature Lac	Date 11-9-12



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

- History and Development of Surveying
- Surveying Field Notes and Field Book Documentation
- Linear Measurement
- Leveling
- Angular Measurements and Directions
- Traversing
- Boundary Surveys
- Areas
- Topographic Surveys
- Construction Surveys
- Earthwork Volume and Area Calculations

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
Describe the surveying profession and its historical impact; demonstrate an understanding of basic surveying terminology, surveying equipment and measurements; list the steps required in performing a survey; employ mathematical skills and use scientific calculators to calculate survey error and adjustment.	Classroom assignments, field assignments, knowledge of procedures and responsibilities

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Surveying Fundamentals and Practices 6th Edition; by Jerry A. Nathanson, Michael Lanzafama and Phillip Kissam

IV. Suggested Course Maximum - 20

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Computer work station to include printers/plotters, projection system and appropriate software.
Surveying equipment and lockable storage facilities for surveying equipment.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

Written exams, projects, and daily lab work.

A = 100 -90

B = 89-80

C = 79-70

D = 69-60

F = 59 or below

"C" or above in all degree specific classes

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:

- Basic Intellectual Competencies
- Perspectives
- Exemplary Educational Objectives

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.