



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 – SRVY 1301

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 #: 3:2:4

Equated Pay hours for course - 4

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 limitation of errors. Calculation to determine precision and error of closure.

Prerequisites/Co-requisites – DFTG 1493

List Lab/ Other Hours
Lab Hours 4
Clinical Hours
Practicum Hours
Other (list)

Prepared by Jo Ann Shimek

Date 06/11/2015

Reviewed by Department Head Jo Ann Shimek

Date 06/11/2015

Accuracy verified by Division Chair: David Kucera

Date: 07/15/15

Approved by Dean or Vice President of Instruction: Leigh Ann Collins

Date: 3-3-16



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

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Describe the surveying profession and its historical impact; Apply basic surveying terminology, identify surveying equipment and perform measurements; List the steps required in performing a survey; Apply mathematical principles and use scientific calculators to calculate survey error and adjustment.</p>	<p>Classroom assignments, field assignments, knowledge of procedures and responsibilities</p>

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

Lecture:

Daily Work - 20%
Quizzes - 10%
Exams - 30%

Lab:

Lab Participation - 10%
Field Book - 10%
Final Project - 20%

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.