

Course Syllabus Surveying 1301 Fall 2012

Department: **Surveying**

Course : **Srvy 1301, 8705 WB Introduction to Surveying**

Start Date 8/27/2012

End Date 12/11/2012

Modality: Web Based

Credits: 3

Corequisites concurrent enrollment in Surveying 1309 and Surveying 1315

ICO's 1, 2, 3, 4, 5

Instructor: **Paul A. Wilson**

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OC Phone **(432) 335-6494**

Course Description: Lecture

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

- Keep a fieldbook for various projects
- Plan a level loop
- Plan a Boundary Survey
- Plan a Topographic Survey
- Prepare a field sketch for a project
- Locate appropriate records to begin a boundary Survey
- Describe map projections and calculate surface distances
- Understand different types of surveys, and the tools required for each

Academic Ethics: Students are expected to do their own work on assignments and take tests without outside assistance. If unethical behavior is detected, by Odessa College Policy, all parties may either be denied credit for the project, or, at the instructor's discretion, the student may be dropped from the course. A report will be made by the chairman for further action as deemed necessary by the department chair.

Required Readings/Materials **Elementary Surveying**, Ghilani, Wolf, 13th edition, ISBN 9780132554343

- Texas Instruments -30 calculator is the only calculator to be used in this class
- Engineer's scale, protractor and graph Paper (scalable grid)
- Thumb Drive at least 1 gig
- Other materials as assigned
- High speed internet connection and up-to-date computer

Course Requirements (Lectures, Assignments and assessments)

1. Take All Tests
2. Complete all homework assignments on time
3. Weekly participation in discussion groups
4. Every student will be required to prepare a presentation PowerPoint and video on a topic to be assigned
5. Missed classes will be made up with appropriate assignments

Grading Policy: 4 multi-chapter tests , lowest dropped	40%
Final Exam, subject matter taken from above tests	20%
Class Discussion Participation	20%
Weekly Assignments	20%

Class Schedule by Week

1. Overview and Introductions. Chap 1 Elementary Surveying
2. Units of Measurement and Field Notes Chap 2 Elementary Surveying
3. Levelling Chap 4, 5 Elementary Surveying
4. Methods for Measuring Distances Chap 6 Elementary Surveying (Test 1-4)
5. Angles, Azimuth and Bearings, Chap 7 Elementary Surveying
6. Total Station Use Chap 8 Elementary Surveying
7. Traverse with Total Station
8. Total Station use, Data Collector (Test 5-8)
9. Coordinate Geometry, Surveying and Mapping Chap 11 Elementary Surveying
10. Traverse procedures with Total Station Chap 9 Elementary Surveying
11. Traverse procedures with Total Station II Chap 10 Elementary Surveying
12. Horizontal Curves and Vertical Curves (Test 9-12)
13. Boundary Surveys Chap 21 Elementary Surveying
14. U.S. Public Land Survey System Chap 22 Elementary Surveying
15. GPS and GIS Chap 13-15, 28 Elementary Surveying (Test 13-15)
16. Review