## Course Syllabus Surveying 2335 Fall 2012

Department: Surveying

Course: Srvy 2335, 7245 Lecture/Lab Geodetic Surveying

Start Date 8/27/2012

End Date 12/11/2012

Modality: Lecture/lab Face to Face

Credits: 3

Corequisites concurrent enrollment in Surveying 2335

ICO's 1, 2, 3

Instructor: Paul A. Wilson

OC email: pwilson@odessa.edu

OC Phone (432) 335-6494

Course Description: Lecture

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

Establish geodetic position for a control point and azimuth and

Transform to Texas State Plane Coordinates Establish Azimuth by Polaris Observation

Determine magnetic declination for Control Point

Prepare a report on process

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, 13<sup>th</sup> 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 (Subject to Change)

- 1. Overview and Introductions. Chap 19 Elementary Surveying
- 2. Map Projections
- 3 GPS Surveying Intro and Intro Aerial Mapping Chap 13, 14
- 4. Aerial Photography (Chap 27) and Caltrans Test 1-4
- 5. Astronomic Observations Basic Astronomy Appendix C Elementary Surveying

Test 5-8

- 6. Astronomic Observations Methods
- 7. Historic Use Astronomic Observation (History of the Rectangular System)
- 8. Triangulation
- 9. Use of GPS in Establishing Project Control
- 10. Use of GPS in Establishing Project Control, contd.11. Special Issues in Geodetic Surveying
- 12. Special Issues in Geodetic Surveying Test 9-12
- 13. Special Issues in Geodetic Surveying
- 14 Geographic Information System Intro
- 15. Geographic Information System, contd.
- 16. Review Test 9-16