



Course Syllabus

ADT 1140 Course Name: Construction Survey

Division: Engineering and Industrial Technologies

Class Days:

Class Time:

Location: Classroom:

Laboratory:

Credit Hours: 3 Contact Hours: 4 Lab Hours: 3 Lecture Hours: 1

Instructor: _____

Office Location:

Phone: _____

Email Address: _____

Office Hours: TBD

Division Office/Location: Engineering Building Division Fax: 419-334-2300

Full-time Contact Person: William Hotz Phone(s): (419) 559-2448

Course Description:

Basic surveying concepts, surveying instrumentation: Art of field, data acquisition, planning and execution of field surveys. Application of professional surveying practices engineering and other disciplines. Students will use surveying equipment and general procedures in land surveying: Introduction of computer-based geographic information systems which organize, analyze and present spatially reference data.

Prerequisite(s): MTH1320

Corequisite(s): None

Entry Level Skills and Knowledge: Knowledge of trigonometric functions

Required Texts, Supplies and Equipment:

TEXT: Surveying Practice
by Kissam

Geotec Field Book

Can be purchased at the Terra Community College Bookstore or City Blueprint of Toledo.

Grading:

90-100 = A
80-89 = B
70-79 = C
60-69 = D
Below 60 = F

Learning Outcomes:

General Education

1. **Communicate effectively**
 2. **Evaluate arguments in a logical fashion**—Competence in analysis and logical argument are explicit learning goals for most general education programs, although these skills go by a variety of names (e.g., critical thinking, analysis, logical thinking, etc.). **Students will be able to demonstrate competence in problem solving in communication, mathematics, and in team settings.**
 3. **Employ the methods of inquiry characteristic of natural sciences, social sciences, mathematics, and the arts and humanities;** general education introduces students to methods of inquiry in several fields of study and thereby prepares students to integrate information from different disciplines.
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1. Have an understanding of the fundamental surveying principles associated with the tape, level, laser and transit.
 2. Have a proficiency in performing basic surveying operations in the field using the tape, level, laser and transit.
 3. Have the ability to translate field data into meaningful information through calculations and plotting to scale.
 4. Have the ability to solve field problems commonly encountered in building construction and other areas.

Assessment of Student Learning:

Assessment Project and Measurement in course (if any):

Plan of Work:

Session

Activity

Course objectives, units of measurement, instrument identification

Chapter 1, Care of equipment, hand signals, note keeping--set up instruments.

Chapter 2, Taping, pacing, right angle with tape

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Chapter 3, Level demonstration and practice

Field exercise with level

Field exercise with level

Field exercise with level

Review and Test

Chapter 4 (4-1 through 4-4) Transit

Chapter 4 (4-15) Transit lecture and set-up

Field exercise with transit

Chapter 7 (7-1 through 7-8, 7-12) Topographic Surveying

Field exercise with transit

Field exercise with transit

Plotting and contouring

Review and Test

Chapter 11 (11-2 only) Laser

Field exercise with laser

Field exercise with laser

Review and Test

Course Requirements:

The final grade will be based on the following values which represent the relative weights of the coursework.

Field Work - 50%

Field Book - 20%

Tests - 30%

Attendance for field work is necessary since 50% of the grade is field work. Absenteeism from field work will result in a significant deduction of the final grade. Attendance will be taken each session.

Policies

Course Withdrawing: If for any reason you need to withdraw from this course, be certain that you do so according to College procedure. It is your responsibility to know and follow this procedure. If you simply stop coming to class, without officially withdrawing from the course, your grade is an automatic "F." Please follow official College procedure for withdrawing from this or any course.

College Academic Policies are located in the College Catalog. A copy of the current catalog may be picked up in any of the division offices or admissions. The list of college policies is also available online at <https://www.terra.edu/register/Collegecat/policies.asp>.

Support Services: The College offers a number of support services to assist in your success in this course and all courses. Among these services are the Writing & Math Center in B105, the Office of Learning Support Services, which coordinates the campus disability services and tutoring programs, the computer labs, and the computers in the atriums.

Any student who feels he/she may need an accommodation based on the documentation of a disability should contact the Office of Learning Support Services privately to discuss his/her specific issues. Please contact the OLSS at (419) 334-8400 X 208 or visit 100 Roy Klay Hall (Building A) to coordinate reasonable accommodations.

If you have a documented disability and are receiving academic accommodations through the Office of Learning Support Services, please schedule a meeting with your instructor in a timely manner so that we may discuss how these services will be arranged.

Tutoring services are available to students beginning the second week of every quarter. Students requesting tutoring services should obtain a tutor request form from the OLSS in 100 Roy Klay Hall (Building A) or online at the Terra website. Please note that instructor verification and acceptance of the Student Learner Agreement is necessary for all tutoring requests. All requests should be submitted to 100 Roy Klay Hall (Building A).

