

Adjunct Instructor of Surveying

Fall and Spring semester openings for Introductory Surveying courses (EGG 260 in fall & EGG 261 in spring) on the Rangely residential campus.

This course prepares students for work in the civil engineering field.

Pay commiserate with educational background (\$1700-\$2100/course plus possible enrollment bonus)

[Adjunct pay scale and contract](#)

Instructor is required to be present 5 hours per week for classroom instruction, with outside availability to students preferred.

Educational background in engineering or related field required. Licensed Surveyor is highly desirable.

Contact [Allen Vaught](#) for further information: 970-675-3207

Course Description: EGG 260 Engineering Surveying I

Focuses on plane surveying including pacing, chaining, horizontal and vertical distances, care and use of engineering levels, transits and theodolites. Emphasizes the proper survey note procedures, and surveying terminology. Covers various procedures in the calculation of bearings, azimuths, and slope reduction.

Competencies View:

1. Operate various surveying equipment
 - i. Hand levels, dumpy levels and auto levels.
 - ii. Transits, digital transits, theodolites, and total stations.
2. Recognize various surveying terms
3. Perform basic surveying calculations
 - i. slope reduction
 - ii. bearing and azimuths
 - iii. Keep quality survey notes.

Outline View:

1. Introduction to Surveying
2. Horizontal Distances
 - i. Pacing
 - ii. Chaining
3. Vertical Distances
 - i. The level (hand, dumpy, auto)
4. Leveling
 - i. Differential
 - ii. Profile
 - iii. Cross Section Leveling

5. Measuring Angles
 - i. Transit
 - ii. Theodolite

Course Description: EGG 260 Engineering Surveying I

Introduces land surveying including legal terminology, riparian rights, legal descriptions, common law, statutory law, and the public land survey system. Addresses construction surveying including note keeping, construction etiquette, building layout, slope staking, and horizontal and vertical curves. Covers topographic surveying, x, y, z coordinates using total stations, and data collection.

Competencies View:

1. Use of various surveying equipment (including theodolites, electronic distance meters, total stations, etc.).
2. Recognize surveying terms; calculate bearings, distances, coordinates, and various survey calculations.
3. Recognize topographic surveying, be familiar with circular curves, and land surveying techniques.
4. Recognize, identify, and define specific legal aspect terms, policies, and procedures.
5. Recognize, identify, and define specific construction surveying terms and techniques.

Outline View:

1. THE TRAVERSE
 - i. Bearings and coordinates
 - ii. Closure sheets
 - iii. The computer software
2. LEGAL ASPECTS
 - i. Terminology
 - ii. Purpose
 - iii. Laws (types)
 - iv. Transferring Property
 - v. Deeds
 - vi. Boundary Evidence
 - vii. Riparian Rights
 - viii. Public Land Survey System
3. CONSTRUCTION SURVEYS
4. CONSTRUCTION SURVEYS DEALING WITH SLOPES
5. HORIZONTAL AND VERTICAL CURVES
6. USING THE SURVEYING SOFTWARE
 - i. Introduction
 - ii. ADCADD CIVIL, SMI and other types