



## **SYLLABUS**    LSOP 230    Theory of Line Locating    .5 credits

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### **CATALOG DESCRIPTION:**

Students will acquire a basic understanding and techniques for locating underground electrical and metal piping lines. Included will be operation and usage of a metal detector and actual hands on in the yard. Safety will be strictly enforced.

Prerequisites: Must have completed 80% of ENGY Certificate requirements

Semester Offered: Spring, Summer, Fall

### **Course Learning Outcomes**

#### **Common Student Learning Outcomes**

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

##### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

##### **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

##### **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

##### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

##### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

##### **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

*Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.*

Upon successful completion of the course, the student will be able to...

1. Appropriately document follow State rules for locating underground utilities.
2. Describe techniques and workings of metal detector.
3. Explain how to find a known set of water, electrical, or steel lines.
4. Identify proper equipment, operations, and tools for completing line locating
5. Identify different types of locating equipment and the proper use of this equipment.
6. Identify the difference in utilities and steel lines carrying gas or oil.
7. Explain when to locate and what State and Local rules are required.
8. Identify different colors used for differing utilities and pipe by NM ONE CALL.