

## **ENER-2160** ADVANCED LIQUID AND GAS MEASUREMENT .5 CREDITS

#### **S**YLLABUS

#### **CATALOG DESCRIPTION**

Course provides instruction on measurement methodologies and regulatory requirements for hydrocarbon storage tank liquids and natural gas measurement. Class will include API calculations and regulations for measuring both liquids and gas. Students will be introduced to the economics of accurate and inaccurate measurement methods.

Prerequisites: ENER 119

Semester Offered: All

# 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.

## **COURSE LEARNING OUTCOMES**

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

- 1. Identify the API gravity and temperature for oil and gas sales.
- 2. Identify the primary components necessary for manual tank measurement.
- 3. Identify the common types of gas measuring devices.

4.	Understand now liquid and gas measurement impacts economic income to the company.