

# **ENER** 1160 Intro Plunger Lift Systems 5060 0.50 Credits Syllabus

#### Instructor Information

Richard Lee leer@sanjuancollege.edu

#### Course Information

Meeting times and location: TH 08:00AM 03:30PM MAIN SOEL 99132

**Catalog description:** Basic principles of the design and operation of plunger lift systems and its relationship to the wellhead separator.Instruction provides students with standard terminology to promote effective communication regarding incremental deliquification for maximum uplift, maintenance issues, and potential malfunctions. By understanding and correctly indentifying plunger lift system design and function, students will be able to perform basic operations and troubleshooting tasks.

Terms offered: All Semesters

## Course Level Objectives

- Improve operational efficiency (deliquification) by focusing on basic tasks involving the plunger lift system.
- Proactively identify and communicate potential malfunctions on a plunger lift system to save money and time, and to avoid environmental incidents.
- Perform basic troubleshooting techniques on a plunger lift system, reducing production downtime.
- Better understand and mitigate the safety risks inherent to operating a plunger lift system.
- Monitor tubing and casing pressure, and calculate tubing liquid level for slug flow (separator capacity).
- Use the morning report to troubleshoot plungers for any abnormal arrivals (too slow, too fast, or not at all).

 Respond appropriately to emergency and critical situations related to Plunger Lift system.

# Required Texts and/or Materials

**No Text Book Required** 

## Required Technology and Software

- Canvas
- · Chrome, Safari, or Firefox

This class is a face to face class and includes a booklet that mirrors the class lecture. No text book required. A calculator or a smartphone with a calculator is not required but helpful.

## **Technical Support**

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at <u>San Juan College Help Desk</u>.

For tickets and password reset: San Juan College Help Desk

For Canvas support information: Canvas Support

# Accessibility/Privacy Policies for all Technology Tools Used

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## Course Requirements

Students will do the following activities:

- · Describe and identify plunger types.
- Identify components of the plunger lift system.

- Explain principles of plunger lift system operation.
- Explain wellbore schematic as it relates to plunger lift system.
- Explain how the arrival signal instrument works, and know how to test it for proper functioning.

## **COVID Safe Practices for Attending Class**

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services:

disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please "wash in, wash out"--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

## Student & Community Services

The Student & Community Services webpage provides information regarding multiple academic, non-academic, and community services available at San Juan College.

## Participation and Attendance Policy

This is a one-day course and attendance is required for the entire session. Consideration will be made if the student contacts the instructor before the class begins and the instructor is able to accommodate a short absence and supplement missing instruction.

## Other Classroom Policies and Expectations

Students are expected to be on-time and prepared to learn. No phone calls or texting in class. Breaks will be 5 minutes every hour. Students should wear appropriate clothing for inside and outside lab work. No open-toe shoes in the labs. Students should bring a jacket to class during winter classes for activities in the outside lab.

## Canvas Participation and Expectations

Currently this class is not available through Canvas.

## Instructor Response Time

Your instructor will respond to messages within 24 hours.

#### Course Time Commitment

This is a one-day class from 8AM to 3:30PM with a one-hour lunch break.

## Grading

Final grades are calculated based on the following...

The final test grade will determine a student's grade for the class. Participation is expected in class and inappropriate behavior may impact the grade.

## Key Dates to Remember

August 24: First Day of Semester

September 5-6: Campus Closed - No Classes Held

September 7: Campus Closed - Labor Day - No Classes Held

October 1: Deadline to Apply for Fall Graduation

November 16: Registration for Spring 2021 Begins

November 23-28: No Classes Held

November 25-29: Campus Closed – Thanksgiving Break

December 15: Last Day of Semester

Full Academic Calendar

#### Course Schedule

This is a one-day class with a specific topic that relates to the APPO program. Since it is a one-day class there is no pre or post work for this class.

## College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

#### 1. Academic Accommodations - American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to <u>Disability Services Office</u>, click the button for "Request for Services" and complete all the steps.

You can also contact the college's disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

#### 2. The Family Educational Rights and Privacy Act (FERPA)

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

#### 3. Academic Honesty Rules

San Juan College expects all students to adhere to the <u>Academic Honesty Rules</u> as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

#### 4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college.

The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

#### 5. **Student Safety**

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College's emergency messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with <u>Rave</u>. When registering, please make sure that your mobile status is "confirmed."

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.)

#### 6. **Drop for Non-Attendance and/or Non-Participation**

#### Class Attendance and Participation Expectation:

<u>Face-to-Face</u> -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

<u>Competency-Based Education Classes</u> -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive

interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

#### **Failure to Meet Class Participation Expectation:**

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

#### 7. **Grading Policies**

**Incomplete: Incomplete Grade Assignment** (Incomplete Grades Information)

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control.

Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

#### 8. Grade Appeals

The policy for grade appeals is in the Academic Catalog.(Grade Appeal Policy)

# Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

Student Handbook