



## SYLLABUS

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### CATALOG DESCRIPTION

Course presents basic principles of dehydration. Students learn standard terminology to promote effective communication regarding equipment maintenance and potential malfunctions. By understanding and correctly indentifying central delivery point or skid-mounted dehydrator design and function, students will be able to perform basic operations and troubleshooting. Course covers water content of natural gas, components of dehydrator, dehydration process (glycol cycle and gas path), operation guidelines, troubleshooting, and safety and environmental considerations.

Prerequisites: None

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. Count glycol pump strokes-per-minute and check against appropriate chart to make sure it's correctly set.
2. Check and maintain proper reboiler temperature.
3. Drain fuel gas scrubber.
4. Shut in dehydrator and blow down equipment.
5. Use correct procedure for least amount of TEG loss during blow-down.
6. Perform controlled start-up and shut-down of dehydration unit to avoid "unloading the contactor."

7. Troubleshoot dehydration system, including TEG color, setting air-to-fuel ratio for burner, and changing the glycol filter.
8. Control for safety/critical situations.
9. Visually inspect dehydration equipment.