

# SYLLABUS

**COURSE # AND TITLE** \_COMP250\_ **Nat Gas Basic Inst/Cntrl** \_# OF CREDITS\_ **3**\_

**CATALOG DESCRIPTION:** Provide students with an introduction to basic uses of instrument and controls associated with natural gas compression.

**Semester Offered:** Fall, Spring and Summer

**Prerequisites:** COMP245 or equivalent work experience

*Common Student Learning Outcomes*

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

<i>Learn</i>	<i>Students will actively and independently acquire, apply and adapt skills and knowledge to develop expertise and a broader understanding of the world as lifelong learners.</i>
<i>Think</i>	<i>Students will think analytically and creatively to explore ideas, make connections, draw conclusions, and solve problems.</i>
<i>Communicate</i>	<i>Students will exchange ideas and information with clarity and originality in multiple contexts.</i>
<i>Integrate</i>	<i>Students will demonstrate proficiency in the use of technologies in the broadest sense related to their field of study.</i>
<i>Act</i>	<i>Students will act purposefully, reflectively, and respectfully in diverse and complex environments.</i>

## **GENERAL LEARNING OBJECTIVES**

1. Identify control devices as to manufacturer and model
2. Interpret gauge readings in relation to compressor operation parameters
3. Locate specifications pertaining to ignition system in appropriate service manual
4. Diagnose annunciator panel related to shutdown condition
5. Develop skills in tubing bending

## **SPECIFIC LEARNING OUTCOMES**

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

1. Adjust vibration protection devices to proper level per specifications
2. Adjust lubrication level control devices to proper level per specifications
3. Adjust gas pressure control devise to specification
4. Adjust temperature safety control devices to proper level
5. Adjust liquid level protection devices to proper level
6. Adjust engine speed control devices to specification with regard to load
7. Diagnose, repair, or replace defective tattletale switches
8. Identify equipment as to manufacture and model
9. Remove and replace a magneto per manufacturers specification
10. Install and time a magneto to a given engine
11. Diagnose "no spark" conditions
12. Remove, time and install an Alronic ignition alternator
13. Remove, time and install a Caterpillar ignition system
14. Test/adjust timing for a Caterpillar ignition system

**Syllabus developed by** \_\_Randy R Randall and Linda J Martinez\_\_ **Date:** \_\_\_\_February 15, 2006\_\_\_\_

**Syllabus reviewed by** \_\_\_\_\_ **Date:** \_\_\_\_\_

**A current syllabus must be on file in the dean's office for every course being taught during a given semester.**