SYLLABUS

COURSE # AND TITLE _COMP112_ Natural Gas Engine Repair/Overhaul __ # OF CREDITS ___5_

CATALOG DESCRIPTION: To provide students with techniques and procedures to overhaul and repair natural gas engines to OEM specifications. The course includes a complete disassembly and reassembly of a variety of most commonly used natural gas engines.

Semester Offered: Fall, Spring and Summer
Prerequisites: COMP110

Common Student Learning Outcomes *Upon successful completion of San Juan College programs and degrees, the student will....*	
Learn	*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.*
Think	*Students will think analytically and creatively to explore ideas, make connections, draw conclusions, and solve problems.*
Communicate	*Students will exchange ideas and information with clarity and originality in multiple contexts.*
Integrate	*Students will demonstrate proficiency in the use of technologies in the broadest sense related to their field of study.*
Act	*Students will act purposefully, reflectively, and respectfully in diverse and complex environments.*

GENERAL LEARNING OBJECTIVES:

1. Develop proper techniques for disassembly and inspection of a gas engine
2. Correctly document all Mic readings on a overhaul report
3. Become skilled at proper timing of gear train
4. Prepare an acceptable detailed maintenance report

SPECIFIC LEARNING OUTCOMES

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

1. Mic all components as per OEM
2. Clean and inspect threaded holes, studs and bolts for serviceability
3. Install a crankshaft
4. Assemble pistons and connecting rods
5. Install main bearings and check clearances
6. Inspect cylinder heads and mating surfaces for warpage, thickness and cracks
7. Install rod bearings and check clearances
8. Replace cylinder liners and seals
9. Inspect and adjust liner profusion
10. Install torque cylinder heads
11. Adjust engine valve clearance

Syllabus developed by _Randy R Randall & Linda J Martinez__ Date: __February 14, 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.