MGEM 2615: Motorcycle Power Trans

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 2
Lab Hours/Week: 1
OJT Hours/Week: *.*

Prerequisites:
This course requires all five of these prerequisites
- MGEM 1619 - Compact Diesel Service (Number of Years Valid: 5)
- MGEM 1614 - Snowmobile II (Number of Years Valid: 5)
- MGEM 1620 - Marine Products I (Number of Years Valid: 5)
- MGEM 1612 - Outdoor Power Equipment (Number of Years Valid: 5)
- MGEM 1611 - Engine Service and Rebuild (Number of Years Valid: 5)

Corequisites: None
MnTC Goals: None

This course studies motorcycle engines, clutches, transmissions, and final drives found on Japanese and U.S. built motorcycles; full size motorcycles, mopeds, and dirt bikes are included. Supplied with a motorcycle, necessary tools, and a service manual, learners explain the theory of operation, diagnose problems, and repair the unit per manufacturer's specifications. This shop course provides time for the learner to gain hands-on experience. Work includes engine rebuilding including transmission, valves, and diagnostic practice. Prerequisite: First year of the Marine and Small Engine Mechanic program or instructor approval.

B. COURSE EFFECTIVE DATES: 07/02/2003 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Analyze motorcycle frame design and function.
2. Define motorcycle frame dimensions and affect.
3. Analyze suspension function and purpose.
4. Discuss vehicle handling issues.
5. Perform proper motorcycle tire service.
6. Identify vehicle power flow.
7. Perform brake system service.
8. Disassemble and reassemble 2 and 4 stroke engines.
9. Analyze transmissions used in motorcycles.

D. LEARNING OUTCOMES (General)

1. The learner will identify and repair the different parts of the motorcycle chassis using the right service manual.
2. The learner will repair and adjust a motorcycle engine to specifications using the right service manual.
3. The learner will identify and repair the different styles of brake systems.
4. The learner will identify running quality problems.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted