Alexandria Technical and Community College

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 the following prerequisite
MGEM 2617 - Motorcycle Fuel Systems (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.

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. Indentify 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 tify 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