alexandria technical and community college

mgem 1610: two-cycle engine service & rebuild

a. course description

credits: 3

lecture hours/week: 1

lab hours/week: 4

ojt hours/week: *.*

prerequisites:

this course requires all four of these prerequisites

- mgem 1601 - basic engine principles i (number of years valid: 5)
- mgem 1602 - basic engine principles ii (number of years valid: 5)
- mgem 1603 - four-cycle engine service & rebuild (number of years valid: 5)
- mgem 1604 - snowmobile i (number of years valid: 5)

corequisites: none

mntc goals: none

learners overhaul and repair lawn, garden, and recreational engines under shop conditions according to manufacturers' recommendations. this includes cylinder reboring. learners gain valuable experience in shop conditions doing complete engine overhauls on the many types of engines used. prerequisite: mgem1601, mgem1602, mgem1603, and mgem1604.

b. course effective dates: 12/22/1997 - present

c. outline of major content areas

1. describe 2-cycle theory.
2. identify different 2-cycle engine designs.
3. identify 2-cycle diagnostic procedures.
4. perform 2-cycle diagnostic procedures.
5. evaluate the results of diagnostic tests.
6. estimate the cost to repair.
7. identify special tools needed for 2-cycle rebuild.
8. perform 2-cycle engine rebuild.
9. demonstrate safe use of tools and equipment.

d. learning outcomes (general)

1. the learner will identify and describe 2 cycle engine designs.
2. the learner will demonstrate safe power tool operation during rebuild.
3. the learner will assemble 2 cycle engine to industry standards.

e. minnesota transfer curriculum goal area(s) and competencies

none

f. learner outcomes assessment

as noted on course syllabus

g. special information

none noted