A. COURSE DESCRIPTION

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

Prerequisites:
This course requires the following prerequisite
MGEM 1612 - Outdoor Power Equipment (Number of Years Valid: 5)

Corequisites: None
MnTC Goals: None

Learners study the history of the outboard motor and apply two-cycle theory to outboards. Study is limited to engines less than 30 H.P. Instruction includes engine tune-up and troubleshooting, lower unit and water pump repair, correct motor to boat propping, and tank testing. Basic electricity is also covered. 
Prerequisite: MGEM1612.

B. COURSE EFFECTIVE DATES: 12/22/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Define outboard terminology and history.
2. Identify outboard motor components.
3. Describe outboard motor maintenance procedures.
4. Identify lower unit components.
5. Describe lower unit repair procedures.
6. Perform lower unit maintenance procedures.
7. Identify outboard electrical terms and components.
8. Describe outboard electrical systems.

D. LEARNING OUTCOMES (General)

1. The learner will define and apply marine terminology as it pertains to the products being serviced.
2. The learner will complete lab projects on outboards as prescribed on competency list.
3. The learner will demonstrate the ability to complete small outboard tune-ups.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted