**Alexandria Technical and Community College**

**MGEM 2607: Marine Drive Systems**

**A. COURSE DESCRIPTION**

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

Prerequisites:  
This course requires the following prerequisite  
MGEM 2608 - Marine Engine Systems (Number of Years Valid: 5)

Corequisites: None  
MnTC Goals: None

Learners study an advanced course in marine drive repair, Bombardier Recreational Division, Mercury Marine, Mercruiser Marine, Volvo Pent, and Yamaha are covered. The focus is on gear case designs, measurements, overhaul procedures, and reconditioning of all the parts in the modern marine drives. Water pumps and maintenance procedures are thoroughly covered. Prerequisite: First year of the Marine and Small Engine Mechanic program or instructor approval and MGEM2608.

**B. COURSE EFFECTIVE DATES:** 06/01/2003 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

1. Define outboard propulsion systems.  
2. Define sterndrive propulsion systems.  
3. Identify proper lubricants.  
4. Assemble & verify sea water cooling system operation.  
5. Demonstrate the safe use of tooling & equipment.  
6. Remove, install & adjust modern outdrives.  
7. Identify & service Transom assemblies.  
8. Define propeller characteristics.  
9. Perform factory rebuild procedures.

**D. LEARNING OUTCOMES (General)**

1. The learner will identify gear case designs and service procedures.  
2. The learner will demonstrate rebuild procedures for complete drive systems.  
3. The learner will demonstrate transom assembly service procedures.

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted