Course:	**MAC 260**
Title:	**5-Axis Mill Operation**
Long Title:	**5-Axis Milling Machine Operation**
Course Description:	**Covers preparation, operation and maintenance of the 5-axis milling machine.**
Min Credit:	**3**
Max Credit:	
Course Notes:	**NCE 12.5.14 JLG**
Origin Notes:	**CCD**
Status Notes:	**Updated 3.20.15**

STANDARD COMPETENCIES:
 1. Demonstrate effective use of the 5-axis milling machine controller.
 2. Load, unload, and manage programs in the 5-axis milling machine and the desktop computer.
 3. Perform successful operation of the 5-axis milling machine to create pre-programmed parts.
 4. Demonstrate sufficient knowledge to manage spindle loads and run hours on the 5-axis milling machine.
 5. Evaluate correctness of a G language program (G-code) in the 5-axis milling machine.
 6. Demonstrate successful adjustments to the 5-axis milling machine controller.
 7. Demonstrate operation of a 5-axis milling machine while managing parts and production records.
 8. Create a basic G-code program without the use of Computer-aided Manufacturing (CAM) software.

TOPICAL OUTLINE:
 I. Start up, load, run, and edit programs.
 II. Controller graphics.
 III. Alarms and spindle loads.
 IV. Loading tools.
 V. Check fluid levels.
 VI. Maintain production records.
 VII. Maintain maintenance records.
 VIII. Create start-up, and shut down checklists.
 IX. Load and unloading parts.
 X. Concurrent inspection, maintenance and records.
 XI. Tool setting.