Student Name_____ Instructor Name_____

High School or Vocational Center_____Grade_____

COMPETENCY CHECKLIST FOR ADVANCED TECHNICAL PLACEMENT
Manufacturing Technologies

MT 205
NC/CNC (Numerical Control/Computer Numerical Control)
3 Credit Hours

An introductory course in practical application of numerical control machining, and off-line programming. Designed to expose students to the basic concepts of numerical control with G and M codes.

To meet the standards for articulated credit, the student will demonstrate competency in the tasks listed below. Competency standards will be determined by the high school instructor.

Task	Satisfactory	Unsatisfactory
GENERAL TASKS		
Exhibit an understanding of safe operating procedures for each machine tool in the course		
Display a willingness to follow all safety procedures		
Use the proper terminology for each machine and tool used in the course		
Be able to calculate the correct speed for a given machine operation		
Be able to calculate the correct feed for a given machine operation		
Read and follow a process sheet		
CNC		
Describe the History and Definition of CNC		
Identify the basic parts and operation of the CNC milling center		
Outline and identify each of the CNC coordinates		
Be able to describe the CAD/CAM/CNC process		
Demonstrate the ability to create a milling program complete with speed and feed calculations		
Be able to identify and create CNC Canned Cycles		
Demonstrate the ability to create and execute a CNC program		
Describe the process to create successful First Part run offs		
Identify the basic parts and functions of the CNC Turning Center		

Task	Satisfactory	Unsatisfactory
Demonstrate the ability to create and trouble shoot a CNC program complete with speed and feed calculations		

Instructor's Signature _____Date _____