

Mechanized Agriculture Assessment Plan Rev. 6/15/2018

Mechanized Agriculture	14-15	15-16	16-17	17-18	18-19	19-20
MCAGB2 - Introduction to Mechanized Agriculture						
• Upon completion the student will be able to: Develop an accurate construction plan that includes a bill of materials, project measurements, machine setups and material types for a given project to be constructed in class.				X		
• Upon completion the student will be able to: Identify safe shop practices and potentially hazardous safety conditions in the work environment.				X		
• Upon completion the student will be able to: Illustrate knowledge of concrete by forming, pouring, screeding, and finishing a slab to a proper size and slope.				X		
• Upon completion the student will be able to: Assemble an electrical wiring board or display as per instructions.				X		
MCAGB3 - Small Gas Engines						
• Upon completion the student will be able to: Differentiate an understanding of two and four stroke small engines.						X
• Upon completion the student will be able to: Demonstrate basic technical skill and knowledge to perform routine maintenance.						X
• Upon completion the student will be able to: Assess the basic technical skill and knowledge to troubleshoot and diagnose small engine problems, perform tune-ups, engine overhauls and read and understand technical manuals.						X
MCAGB4 - Agriculture Safety						
• Upon completion of the course, the student will be able to demonstrate safe tractor and machinery maintenance. • Ascertain the value of an organized effort to obtain maximum service from tractor units at optimum efficiency • Identify and apply lubricants and lubrication techniques used on tractors and equipment and perform minor tractor maintenance • Perform tasks that are necessary to assure maximum economy and efficiency of operation of farm tractors under varying situations and conditions • Acquire desirable skills, abilities, and techniques used in safe equipment operation				X		
• Upon completion the student will be able to: Analyze work safety procedures and regulations and explain why they are in place and how they are developed for the equipment required for an agricultural operation. • Perform HASMAT safety procedures and practices • Demonstrate a knowledge of Material Safety Data Sheets • Identify Personal Protective Equipment, their use and care				X		
• Upon completion the student will be able to: List on-site safety requirements and potential hazards for a field work site. • Demonstrate the ability to communicate and work cooperatively with others • Develop a record system for safety training and schedules				X		
MCAGB5 - Agriculture Irrigation Technology						
• Upon completion of the course, the student will be able identify irrigation system components and discuss their purposes and functions.					X	
• Upon completion the student will be able to: Describe the need to use water conservatively as a natural resource.					X	
• Upon completion the student will be able to: Summarize the principles involved in the procurement, distribution, application, and management of water in agriculture.					X	
MCAGB10 - Farm Power Operation						
• Upon completion of the course, the student will be able to develop a general understanding of the parts and systems of farm power equipment and create a maintenance program to keep the equipment functioning properly.				X		
• Upon completion the student will be able to: Evaluate tasks to be performed, select proper equipment needed and operate it to safely to perform needed tasks.				X		
• Upon completion the student will be able to: Communicate to others in the field and work cooperatively to meet required tasks.				X		
MCAGB11 - Farm Power Diesel Repair						
• Upon completion of the course, the student will be able to communicate basic diesel engine principles						X
• Upon completion the student will be able to: Measure serviceable engine components and compare data to manufacturers specifications						X
• Upon completion the student will be able to: Demonstrate troubleshooting and operation of a diesel engine						X