

WESTERN MICHIGAN UNIVERSITY

TITLE: Horticulturalist

GRADE: M-6

FUNCTIONS:

This position provides highly skilled labor required to select, cultivate, install, maintain and replace plantings and flora on campus grounds. The incumbent collaborates with the Manager and supervisors of Landscape Services to plan and develop root stock and to schedule transplanting of stock to landscape sites and to plan and coordinate other activities required to develop, install and maintain stock for campus grounds. The incumbent prunes and cares for plantings and evaluates plantings to determine which require rehabilitative care, removal and/or replacement. The incumbent maintains plantings by best management practices such as evaluating plant needs and applying nutrients to root zones, applying fertilizers, watering plantings and applying pesticides, fungicides and other horticultural chemicals and compounds. This is typically done by testing and evaluation of soil and plant nutrient and microbial levels using modern research methods of data collection and analysis. This position transplants stock to designated landscape sites, and moves same to accommodate construction projects. The incumbent develops irrigation schedules for campus plantings and directs other grounds crew members who operate those irrigation systems.

This position develops spraying schedules for all campus grounds bedding plants. The incumbent diagnoses insect and disease pathogens and selects the appropriate pesticide, fungicide or other treatment for application to control or eliminate the problem. This position schedules appropriate applications for herbaceous and non-herbaceous plants. The incumbent identifies weed growth on campus and in nursery stock, and applies appropriate control methods for eradication and/or management.

The incumbent uses light and heavy equipment, including bobcat skid loaders, tractors, and man-lift trucks, to prepare sections of campus grounds and nursery beds for planting and/or seeding; to clear detritus and debris from lawns and other areas; to excavate flower and shrub beds and planting wells. This position may be utilized for snow removal operations, operating heavy and/or light equipment, and may also assist in hand shoveling snow. This position fastens attachments to trucks and tractors with wedge-pin and other hitches; connects hydraulic hoses, belts, mechanical linkages and/or power takeoff shafts to trucks and tractors to provide power to raise, lower and tilt attachments; and operates levers and foot pedals to maneuver attachments while driving vehicles. The incumbent uses hand and power sprayers to apply pesticides, weed killers, fungicides and other horticultural chemicals and compounds.

This position utilizes powered saws, trimmers, and other devices to trim plant materials, and employs augers, shovels and other equipment and tools to remove dead or diseased plantings. The incumbent performs minor service, repair and maintenance work for assigned equipment. This position performs appropriate operational checks of all vehicles and equipment before, during and after each use. The incumbent checks fuel, oil, hydraulic, transmission, coolant and other fluid levels; refuels vehicles and adds any required fluid to restore/maintain appropriate fluid levels; checks lights, strobes, electrical connections and safety switches for proper operation; inspects hoses and hose connections/ cleans and/or replaces air filters; greases all fittings; and checks other components and systems/relays specific to each vehicle/piece of equipment. The incumbent inspects

and tests all hitches to ensure that equipment/attachments are properly secured to vehicles. This position cleans and inspects equipment after each use, and uncouples attachments.

The incumbent organizes assigned work so as to minimize the materials and work-hours required for proper completion of the work, and instructs others in the operation and maintenance of tools and equipment. As appropriate, the incumbent will participate in the technical training of full time and temporary staff on horticultural techniques and practices. The incumbent determines inventory requirements for supplies and materials, and notifies supervisory personnel when (re)ordering are necessary. This position maintains the work area, all tools, all equipment, all supplies and assigned vehicles in a neat, clean and orderly condition and performs all work in accordance with established safety practices. The incumbent must wear MIOSHA approved safety shoes at all times and must wear a hard hat and safety glasses when operating equipment and hand-held power tools. The incumbent must wear a pesticide suit and respirator as legally required by label when applying certain pesticides and other chemicals. Ear plugs are required when operating equipment producing noise levels exceeding MIOSHA standards. Other protective gear must be worn when appropriate. The incumbent must wear no loose fitting clothing which might become entangled in equipment, posing a hazard to incumbent's safety. This position performs additional duties as requested by supervisory personnel.

Qualifications:

Considerable knowledge of horticultural principles, practices and techniques is required. This is typically obtained through a Bachelor's degree in Horticulture, Plant Science or related field; OR five years of horticulture or related experience; OR any equivalent combination of experience and/or education from which comparable knowledge, skills and abilities have been achieved.

The incumbent must be able to read and comprehend written instructions and safety regulations governing the performance of job duties, and must possess good mathematical and writing skills for mixing pesticides and other chemicals, maintaining records documenting the use thereof and preparing training documents as needed.

Thorough working knowledge of the flora found in SW Lower Michigan and the growth behavior of, and the pathogens common to those flora is required.

Possession of a valid Michigan Commercial Drivers License (CDL) with endorsement "B", air brakes is required and must be obtained within 90 days of the date of hire as well as a Michigan Department of Agriculture Commercial Pesticide Applicators License with endorsements for Turf (category 3A), Ornamental (category 3B) and Right-of-Way (category 6). In order to perform the essential functions of the job, the incumbent must be able to raise 100 pounds dead weight to/from a height of 36 inches to load/unload equipment from trucks and trailers. The incumbent must be able to lift 50 pound bags of seed and fertilizer to load tractor spreaders. The incumbent must be able to operate hydraulic couplers to engage/disengage attachments and equipment.

The incumbent must be able to pull-start small engine equipment.

The incumbent must be able to use ladders to climb up and down from heights of up to 20 feet.

The incumbent must be able to operate equipment and transport and operate hand-held power tools and manual equipment.

The incumbent must be able to ascend to/descend from heights up to 48 inches as often as 50 times per day in order to enter/exit from truck, tractor and backhoe cabs, and must be able to enter and maneuver in restricted spaces in order to enter cabs and operate vehicles and attached equipment.

The incumbent must be able to ascend to and balance on vehicle wheels 48 inches to 60 inches high and other exterior features in order to access vehicle engines and components in order to perform inspections and operator maintenance and preparation.

The incumbent must be able to open engine housings and exert 30 lbs. of force or more to pull out batteries for inspection while balancing on wheels or other exterior structures.

The incumbent must be able to operate clutches, accelerators, brakes, foot-controlled steering mechanisms and other vehicle and equipment controls.

In order to operate tractors and trucks with attachments, and skid loaders with buckets and backhoe attachments, the incumbent must be able to simultaneously operate steering mechanisms, vehicle controls and levers operating attachments.

The incumbent must be able to operate chain saws.

The incumbent must be able to descend to, and rise from, ground level as often as 50 times per day in order to access seedlings and other plantings.

The incumbent must also be able to work from below ground level from a kneeling or prone position. The incumbent must be able to lift 80 lb. blocks up to 400 times a day in the construction of retaining walls and patios.

In order to obtain a valid Michigan commercial driver's license, the incumbent must possess 20/40 vision with or without corrective lenses.

The incumbent must possess sufficient visual acuity with or without corrective lenses to inspect vehicles, engines, and equipment and to accurately align vehicles with couplers/hitches on equipment and to accurately align vehicles with couplers/hitches on equipment to be attached to vehicles.

The incumbent must be able to identify debris and other road/ground hazards while operating vehicles and equipment.

The incumbent must be able to inspect plantings for, and visually identify insects, fungi and evidence of other pathological conditions.

The incumbent must possess sufficient auditory acuity, with or without accommodation, to hear vehicle warning sounds signaling that vehicles/equipment are operating/moving in reverse.

The incumbent must be able to tolerate, with appropriate type of hearing protection, exposure to noise levels of 90 decibels.

The incumbent must be able to tolerate exposure to extreme temperatures ranging from -25°F to 120°F, depending on seasonal work assignments.

The incumbent must be able to tolerate exposure to dust, dirt, pollen, grass and grass clippings, fertilizers, weed killers and other lawn care chemicals, as well as to pesticides, fungicides and other toxins.

The incumbent must be able to tolerate exposure to gasoline, diesel fuel, motor oil, other lubricants, antifreeze, hydraulic fluid and other petro-chemicals.

The incumbent must be able to tolerate prolonged exposure to sunlight.

A physical examination administered by the employers designated physician is required to determine the incumbent's ability to perform the essential functions of the job with or without accommodation.