

# Warren Wilson College

## Position Description

**POSITION TITLE:** Assistant Supervisor, Heating and Air Conditioning Services

**DEPARTMENT:** Heating and Air Conditioning Services

**REPORTS TO:** Supervisor, Heating and Air Conditioning Services

### **POSITION SUMMARY:**

Responsible for assisting the HVAC Supervisor in establishing and maintaining the heating, air conditioning and control systems on campus in order to provide a comfortable and healthy environment. The Assistant Supervisor trains, supervises and works with a student work crew in operating and maintaining the systems.

### **SPECIFIC RESPONSIBILITIES:**

1. Assists supervisor in developing a preventive maintenance program that includes automation in the work order system, identification of just in time training needs, procedures, tool & equipment needs, and part needs, and supporting documentation.
2. Analyzes and solves refrigeration equipment problems by understanding refrigeration cycles and component diagnostics. Performs maintenance, diagnostics and repairs on air conditioning equipment, ranging from window air conditioning units up to reciprocating chillers. Recycles and charges refrigeration systems.
3. Performs maintenance and repairs on boilers including extensive preventive maintenance and combustion analyses.
4. Diagnoses, repairs, calibrates and installs pneumatic, electric, electronic and direct digital controls. Monitors and diagnoses HVAC system and digital control problems via remote computer as well as within mechanical rooms. Schedules buildings HVAC systems via computer.
5. Diagnoses pumping and piping system design problems and repairs. Repairs will include pump alignment, coupling replacement.
6. Repairs and maintains compressed air systems.
7. Performs belt and sheave failure analyses and repairs. Performs accurate alignment and tensioning.
8. Repairs and maintains all kinds of air blowing equipment and coils. Diagnoses air filter failures and repairs.
9. Assists in developing and documenting most recent practices in preventive maintenance for all aspects of HVAC work.
10. Analyzes systems for proper design and operation, and perform needed repairs. Test and adjust chemical levels.

11. Performs all repairs searching for Root Cause Analysis, and developing means and methods to reduce future repairs. Returns all equipment to as-new condition.
12. Keeps all equipment and equipment rooms clean, painted and equipment properly marked and labeled.
13. Serves on at least one campus committee to strengthen communications and interaction with the campus.

#### **WORKING CONDITIONS:**

1. Must be physically capable of entering small, closed spaces to inspect systems components, and negotiate vertical access to equipment rooms in attics.
2. Must be able to drive appropriate maintenance vehicles, and load and off-load maintenance equipment and tools.
3. Must be able to lift 50 pounds and place on worktable.

#### **QUALIFICATIONS:**

1. Must understand digital control systems:
  - Must show competence in installing all types of analog and digital inputs and wiring.
  - Must be capable of building digital control panels and power supplies.
  - Must have experience in commissioning digital control systems.
2. Must understand conventional control systems.
  - Must understand how to calibrate electric and pneumatic control thermostats.
  - An understanding of receiver controllers and more complex pneumatic control systems is desirable.
3. Must have valid North Carolina State Board of Refrigeration Certification.
4. Must understand how to perform extensive testing and repairs of cast iron and tube boilers, their gas trains, safety and combustion analysis.
5. Should understand primary and secondary systems, air control, proper piping and pumping arrangements.
6. Should be capable of repairing pumps including seals, couplings, and demonstrate proper alignment techniques. Should be capable of reading pump curves.
7. Should be capable of properly tensioning belts, and understanding belt failures.
8. Should understand refrigeration cycles, be capable of charging and recovering refrigerants. Must be capable of analyzing and solving DX and reciprocating chiller equipment.
9. Must understand cooling tower systems, chemical treatment and proper design of same systems.
10. Must have a valid North Carolina Driver's License with no restrictions.
11. Membership in RSES desirable.
12. Mechanical Contractor's license desirable.

