BOARD OF REGENTS STATE OF IOWA

REGENT MERIT SYSTEM

Class Title: ERD Machinist, Senior

Class Code: 6311

Pay Grade: 215

GENERAL CLASS DESCRIPTION:

Under general supervision, designs, constructs, and repairs research machinery, equipment, and apparatus which are not commercially available. Provides functional supervision to other ERD Machinists as required.

CHARACTERISTIC DUTIES AND RESPONSIBILITIES:

- 1. Performs skilled work in the construction, fitting, assembling, and disassembling of machines and equipment using shop mathematics, charts, cables, and handbook formulae. Entails analyzing a variety of specifications, having knowledge of limits, tolerances and strengths of materials, mechanics, gearing joints, weights and volume.
- 2. Consults in absence of foreman with faculty and staff members to obtain information and specifications relative to the mechanical, electrical, and structural requirements for equipment which is to be built.
- 3. Reads and interprets working drawings, sketches, diagrams and blueprints, and prepares working drawings and blueprints for use by the ERD Machinists in the construction of equipment. Inspects work when completed as to correct specifications, dimensions and finish.
- 4. Dismantles machinery and makes emergency repairs on critical equipment as needed.
- 5. Performs lead and silver soldering, fusion arc welding, brazing and acetylene burning.
- 6. Uses electronic and power equipment and other instruments.
- 7. Assists in training apprentices as required.
- 8. Schedules and directs the work of ERD Machinists in foreman's absence, and determines priorities.

KNOWLEDGE, SKILLS, AND ABILITIES:

- 1. Ability to communicate effectively with staff, students and the public.
- 2. Ability to maintain effective working relationships with others.
- 3. Knowledge of the principles, methods and techniques used in the trade.
- 4. Ability to interpret and follow instructions and specifications such as blueprints, manuals, sketches and work orders.
- 5. Ability to operate safely and care for tools, machines and equipment.
- 6. Ability to perform a broad and varied range of assembly tasks with precise attention to detail.
- 7. Ability to lift or maneuver up to 100 pounds.
- 8. Knowledge of occupational hazards and safety precautions associated with equipment assembly.
- 9. Ability to perform preventive maintenance and repairs on technical equipment.
- 10. Ability to exercise functional supervision for subordinate and student employees.

MINIMUM ELIGIBILITY REQUIREMENTS:

Two years experience as an ERD Machinist.

H:(hr/classdes)6311

<u>REVISION EFFECTIVE</u>: October 1, 2009