# Classification and Qualification



The California State University System

# Glassblower

Class Code 7512
Date Established 07-01-62
Date Revised 01-01-78
Occupation Index Reference P-1

#### **DEFINITION:**

Under general direction, working on a State University or College campus, designs or assists in the design of laboratory glass apparatus and fabricates, assembles, or repairs scientific glass apparatus for both instructional and research work.

# **Examples of Typical Activities:**

Incumbents of positions in this class are responsible for translating faculty and staff requirements for specialized glass or scientific apparatus into good quality and finished products. In order to carry out this responsibility, incumbents shape glass tubing according to specifications to form scientific equipment, such as retorts, stills, flasks, special condensers, electrolysis equipment; convert Pyrex and quartz tubings, stopcock and standard taper-ground joints into a variety of specialized supply and equipment items; heat tubing of quartz and soft glass to various conditions by manipulating it on or with a glassblowing lathe, torches, annealing oven, glassblowing cutters, and various hand-operated glass-forming tools; assist faculty in designing extremely complicated glass apparatus and advise them as to the best solutions to all problems related to the need for scientific glass and quartz apparatus, including time, cost and construction or procurement estimates; independently design and blow by hand the more routine apparatus such as condensers, adapters, and claison flasks.

Incumbents may act as consultants in the selection and purchase of new glass working equipment as needed to efficiently handle assignments given to the glass laboratory; organize and conduct glassblowing laboratory; test completed apparatus for conformance with specifications; and, in some cases, keep a log book of all work requests and times required for completion of assignments, for statistical operational inventory and projection purposes.

### **MINIMUM QUALIFICATIONS:**

## **Knowledges and Abilities:**

Thorough knowledge of the physical laws and safety practices of glassblowing; thorough knowledge of glass to metal sealing.

Ability to design, often from rough sketches and oral directions only, simple and complex glass and quartz apparatus; ability to shape and blow glass and quartz tubing, stopcocks and standard taper joints; ability to advise faculty members, students and other staff personnel as to the best solutions to all problems related to the needs for scientific glass and quartz apparatus, including time, cost and construction, or procurement estimates; ability to instruct students in the fundamentals of scientific glassblowing; ability to test completed apparatus for conformance with the necessary stress, pressures, temperatures, etc.

and

### **Experience:**

Equivalent to one year experience as a journey level blower in a scientific concerned with the fabrication of experimental and instructional glassware.

or

Two years experience as a journey level glassblower in a private or industrial glassblowing shop.

and

Any combination of progressively responsible training and experience as a glassblower which demonstrates achievement of a journey level of skill equivalent to that acquired through completion of a glassblower apprenticeship program.

The formal apprenticeship in this trade is usually 4-6 years experience under the supervision of one or more skilled glassblowers.

Work Week Group: 1
Premium O/T: Yes
Shift Differential: No

Employee Category: Non-Academic