

MUSEUM EXHIBITS PREPARATOR

JOB DESCRIPTION

Classification Responsibilities: A Museum Exhibits Preparator is responsible for: the design, fabrication/construction, installation, and repair of interpretive and educational exhibits at City of Mesa museum facilities, purchasing and maintaining inventory, tools, and materials, as well as proficiency in carpentry and other trades skills. Responsibilities include: producing conceptual sketches for engineering and planning projects and presentations, technical drawings, models, prototypes, displays, educational devices, props and environments; researching new materials and techniques and ensuring the safety of exhibits; determining exhibit layout (examples: floor plan, traffic flow); and coordinating and approving aesthetic aspects of the exhibit (examples: colors, placement, lighting, graphics, and signage).

The work: involves displays, cases, stands and accessories for permanent, changing, and traveling exhibits; involves trades work (examples: carpentry, fabrication, welding, metal working, masonry, electrical and painting); and coordinating with skilled trades workers to meet City building code standards. Incumbent uses such materials as: wood, acrylic, fiberglass, glass, Styrofoam, fiber optics, plaster, concrete, or other materials necessary to prepare and display museum exhibits. A Museum Exhibits Preparator is responsible for project management for planned exhibits, including coordination of completion with outside contractors, scheduling and overseeing meetings with exhibit team members, and developing timelines to complete exhibits, providing illustrative and to-scale construction drawings and sketches for fabrication of special items. Must be able to lift and move heavy objects up to 100 pounds, using an aid to assist, and at heights of 12 feet. Heavy lifting, climbing, and strenuous physical activities are essential functions of the position. This position may exercise oversight responsibilities and functional supervision over temporary agency personnel, interns, and/or volunteers; and performs related duties as required.

Distinguishing Features: This classification can be designated as a non-classified, non-merit system, at-will position based on Grant Funded assignment. The Museum Exhibits Preparator is supervised by a Museum Exhibitions Coordinator and differs from the Museum Exhibitions Coordinator class by the coordination responsibility for managing the overall Exhibitions function. Persons in this job class will be involved in individual work assignments, or in design-team work, technical drawings, and ongoing exhibit research. Work is reviewed for accuracy, feasibility of completion, and overall results achieved. During the design and installation of new exhibits, duties may require evening and weekend work. This class is FLSA exempt-professional.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, and experience equivalent to graduation from an accredited college or university with a Bachelor's Degree in one of the following disciplines: Anthropology, Archaeology, Natural Sciences, History, Studio Art, Industrial Design, or closely related field. Coursework in drafting, industrial engineering, or graphics art or design. Considerable (3 - 5 years) experience in finish carpentry. Two years full-time experience in exhibit design, preparation, installation, fabrication, or related area (such as architectural modeling or

industrial exhibit fabrication). Proficiency in the use of computer-aided design (CAD); and other computer software programs such as: word processing, spreadsheet, and production management applications.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire date. Must meet the qualifications to wear a tight-fitting respirator by passing a medical evaluation and a quantitative fit test in accordance with Code of Federal Regulations (CFR) 1910.134 by hire or promotion date and maintain certification.

Substance Abuse Testing. None.

Preferred/Desirable Qualifications. One year of experience in another trade, such as welding, masonry, acrylic fabrication, painting, or electrical work is highly preferred.

ESSENTIAL FUNCTIONS

Communication: Communicates with City employees, volunteers, vendors, contractors, management staff, public officials, and advises the general public concerning possible hazards present. Prepares written exhibit proposals, reports including computer illustrations, exhibit labels, catalogs, grant proposals, and other written documents using computer word processing programs. Provides training on casting, mold-making methods, and other display construction methods to enable coworkers, students, and volunteers to create exhibit materials for a City museum.

Manual/Physical: Inspects, monitors, and evaluates work-related conditions to determine compliance with prescribed operating and safety standards. Observes, inspects, or monitors exhibit conditions to ensure proper maintenance and state of repair. Distinguishes colors to perform electrical wiring work and paint exhibits. Replaces lights, sanding belts, and screens. Performs rough and finished carpentry work and fabrication, welding, masonry, electrical, and painting work. Uses common hand and power tools, such as: hammers, hand saws, screwdrivers, wrenches, planes, chisels, table and miter saws, power driven radial arm and band saws, routers, sanders, drill presses, grinders, planers, wood lathes, spray painters, nail and staple guns, sand blasters, soldering guns, and similar tools. Uses arc and acetylene welding equipment. Cleans and maintains workshop, work areas, tools, and equipment as well as exhibit areas in a safe manner using appropriate materials and cleaning fluids and agents. Works with chemicals such as acetone, thinners and methanol using specialized, non-routine protective equipment. Operates and enters data into a personal computer (PC) to produce CAD drawings, generate reports, produce exhibit proposals, and create informational logs. Prepares schedules to establish timelines for completion. Develops working drawings and specifications for construction. Performs physical inventories of display items, items for construction, construction hardware, etc. Measures distances to confirm dimensions in constructing exhibits items and estimate materials required to complete projects. Estimates equipment, time and materials needed to complete projects. Files orders of materials from the City or other suppliers. Operates a motor vehicle requiring a standard Arizona Driver's License to pick up supplies, move exhibit components, and travel to sites to pick up and return museum materials. Operates forklift, and picks up, transports, and unloads materials. Prepares crates for transporting artwork and storing exhibit items; properly prepares materials for moving, including safely lifting and carrying museum items which are fragile. Mounts, mats, and frames photographs, prints, drawings, and paintings. Designs, prepares, installs, repairs, and maintains exhibit cases, object display stands or

holders, panels, and other items associated with exhibit displays. Constructs wooden shadow boxes to provide depth and highlighting for displays, cases of wood and sheet acrylic to produce secure display areas for artifacts and metal frameworks, for bases, and support and framing of displays. Primes and paints wood, metal, plastic, pressboard, etc., to produce various shading and color effects for exhibits. Paints Styrofoam and plaster cast items to create realistic representations, some of which may be small hand-held educational materials, or displays as large as ceiling height in a room. Prepares and installs objects in cases and on walls and panels and hangs large photographs, fabric hangings, etc., as parts of an exhibit. Uses specialized, non-routine, protective equipment when exposed to fumes when mixing paints or working with thinners, solvents, or similar solutions. Applies oil, latex, acrylic and watercolor paints using appropriate methods. Cuts, glues, and welds plastic materials such as Plexiglas, fiberglass, reinforced polyester, and Styrofoam. Bends and manipulates acrylic to achieve custom shapes and smooths acrylic edges for use in framing. Moves heavy objects such as artifacts, cement, a table saw, wood, steel and other construction materials (up to 100 pounds or more) using a forklift, cart or other aid, for distances of up to 20 feet or more, and at heights of 12 feet or more; accesses lower exhibit areas, or remote excavation areas. Works in small cramped areas to repair exhibit interiors. Digs up ground using a pick or shovel to set up outdoor displays. Moves construction debris from one place to another using a shovel, broom, or similar tool. Sets up or removes folding tables, chairs, or similar objects for special functions. May work in variety of weather conditions. Meets scheduling and attendance requirements.

Mental: Estimates material/labor costs from blueprints or other work plans; researches information to prepare and plan exhibits. Analyzes data, such as material costs, bids, and specifications, and makes recommendations regarding exhibit production and optimum project completion. Monitors expenditures to comply with capital and non-capital budget items. Plans, organizes, and directs activities during installation and construction of museum displays. Prioritizes, assigns, and reviews work of contracted and temporary personnel to conform to project specifications. Performs mathematical calculations for construction geometry. Learns job related material through on-the-job training and in a classroom setting. Comprehends and makes inferences from written material; understands and interprets blueprints, schematic drawings, layouts, exhibit floor plans, or other visual aids, artist renderings and photographs to plan, build, and complete exhibits and exhibit materials. Conducts research in conjunction with other exhibit team members to formulate exhibit concepts and provide support materials for display areas. Resolves procedural, communication, and deadline related problems by offering alternatives and recommendations.

Knowledge/Skills/Abilities:

Knowledge of:

art or other historic artifacts conservation and preservation methods and techniques;

research methods and procedures;

various types of construction joints and their applications including: dovetail, butt, interlocking miter, standard rabbit, dado, and spline mortice;

graphic arts techniques, including: design, color, composition, typographic illustration, and graphic arts media;

project management and control techniques;

rough and finished carpentry, related tools, and related building trades such as: cabinet making,

millwork, sheet metal, and plastic laminate work;
soldering, brazing, oxygen, and acetylene welding and cutting, arc welding, and finishing methods, equipment, and techniques;
fabrication techniques of wood, glass, fiberglass, Styrofoam, acrylics, and metals;
modern techniques for preparation of metal, wood, glass plaster, cement, and similar materials and surfaces to allow for desired and appropriate application of paint;
methods, practices, tools, and materials used in electrical systems installation;
various kinds of paint and primers and their proper application;
concrete and masonry construction techniques (examples: material selection, pouring and surface finishing);
exhibit preparation and lighting methods and techniques; and
occupational hazards and appropriate safety precautions.

Skill in:

use and care of hand and power tools and equipment used in museum exhibit preparation, installation, repair, and maintenance;
use of gas and arc welding techniques, materials, and safety practices; and
use of CAD software programs.

Ability to:

establish and maintain effective working relationships with management, coworkers, subordinates, contracted and temporary personnel, volunteers, and museum patrons;
research exhibit topics for information such as: construction techniques, symbolic uses of color and architectural motifs to achieve accuracy and consistency in the displays, props, and activities to be built;
schedule, monitor, and revise work for construction of the exhibit and maintain project status records;
develop technical drawings to provide instruction and specifications from which other Museum staff can assemble specific activity items and displays;
translate abstract ideas into activities and displays appropriate to the needs of the exhibit and museum objectives;
anticipate and prepare for the technical requirements associated with exhibit installation and display;
collaborate with professional museum staff to generate ideas and approaches to exhibit subjects;
gather pertinent facts, make thorough analyses, and arrive at sound conclusions;
design and fabricate exhibit items;
accurately estimate design and production costs and recommend economical and appropriate reproduction methods;
follow through on details;
devise and apply new methods/techniques to create and build innovative displays; and
visualize concepts three dimensionally without the benefit of drawings.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised 9/23

PN/kg/aa

CS4335.DOCX

CS4398.DOCX (Grant-Funded)

EEO-Prof

JOB FCTN-ART

INCREMENTS 66-200

PAY GRADE: 45

PAY GRADE: 45

IND-9101

SWORN-No