

**TS-111 December 1991**

**General Schedule  
Position Classification Flysheet**



WCPS-2 August 2002

**BIOLOGICAL SCIENCE  
TECHNICIAN  
SERIES, GS-0404**



**Workforce Compensation  
and Performance Service**



## TABLE OF CONTENTS

SERIES DEFINITION .....	3
EXCLUSIONS .....	3
TITLES .....	5
EVALUATING POSITIONS .....	7

## SERIES DEFINITION

This series includes all positions that primarily require a practical knowledge of the methods and techniques of one or more of the biological or agricultural sciences when the work is not more appropriately included in another technician series of the [Biological Sciences Group, GS-0400](#). Biological science technicians provide practical technical support to production, research, operations, or program administration efforts in laboratories, field, or other settings including greenhouses, barns, caves, or wildlife refuges.

This standard supersedes the standard for the Biological Technician Series, GS-0404, which was issued in June 1965 and revised in October 1966.

## EXCLUSIONS

1. Classify positions that require knowledge of one or more of the biological sciences in the appropriate professional series in the Biological Sciences Group, e.g., [Botany, GS-0430](#); [Zoology, GS-0410](#); or [Agronomy, GS-0471](#).
2. Classify positions that primarily involve technical work in the Biological Sciences Group, GS-0400, for which specialized subject matter series have been established in the appropriate specialized series. See the [Plant Protection Technician Series, GS-0421](#); the [Range Technician Series, GS-0455](#); the [Soil Conservation Technician Series, GS-0458](#); and the [Forestry Technician Series, GS-0462](#).
3. Classify positions that involve work related to providing interpretative services to the resource using public, providing visitor and site protection services, and/or management of natural, cultural and other such resources in a park like setting in the [Park Ranger Series, GS-0025](#).
4. Classify positions primarily involved with performing work in controlling and extinguishing fires; preventing fire by reducing or eliminating potential fire hazards; operating fire communications equipment; or nonengineering work in developing and implementing fire protection and prevention plans, procedures, and standards in the [Fire Protection and Prevention Series, GS-0081](#).
5. Classify positions primarily concerned with maintaining law and order, preventing crime, detecting or investigating violations of law, and enforcing laws in the [Police Series, GS-0083](#).
6. Classify positions primarily involved with guarding and protecting Federally owned property in the [Security Guard Series, GS-0085](#).

7. Classify positions primarily concerned with performing technical work related to maintenance and use of recreational materials and equipment and performing limited aspects of recreational work in the [Recreation Aid and Assistant Series, GS-0189](#).
8. Classify positions in technician occupations primarily concerned with supporting scientific disciplines included in other occupational groups, such as the [Medical, Health, Dental, and Public Health Group, GS-0600](#); the [Engineering and Architecture Group, GS-0800](#); and the [Physical Sciences Group, GS-1300](#), in the technician series established in these groups. Note: technician positions that involve research in a medical laboratory working with human specimens of blood, urine, and other substances and materials are classified in the [Medical Technician Series, GS-0645](#). Technician positions in biological research laboratories that involve working with animals, or with specimens of animal blood, urine, and other substances and materials are classified in the Biological Science Technician Series, GS-0404. Positions that involve work with both human and animal specimens in a medical laboratory -- whether clinical or research -- are classified in the series of the primary function, i.e., human to the [Medical Technician Series, GS-0645](#), or animal to the Biological Science Technician Series, GS-0404.

## TITLES

Biological Science Aid is the authorized title for all positions at grade GS-3 and below.

Biological Science Laboratory Technician is the authorized title for all positions at GS-4 and above that involve the performance of work in an operating or research program within a laboratory environment and which require an intensive knowledge of laboratory practices and techniques.

Agricultural Science Research Technician is the authorized title for all positions at GS-4 and above that involve the performance of work in agricultural research activities, e.g., field areas, growth houses, greenhouses, barns, etc., and require primarily an intensive knowledge of agricultural practices and techniques.

Biological Science Technician is the authorized title for positions at GS-4 and above other than those classifiable as biological laboratory technicians or agricultural research technicians.

### Subject Matter Specializations

No parenthetical additions to the basic title are required. However, the specialization listed and defined below may be useful as a parenthetical suffix with the three basic titles for technician positions at GS-4 and above. In addition, agencies may supplement the basic titles by adding a parenthetical suffix, other than those defined below, where necessary, to identify duties and responsibilities which reflect specific knowledges and skills required in the work.

1. Microbiology. Positions concerned with the laboratory techniques used in studying tissues, or microscopic and submicroscopic organisms. Specifically included are positions in parasitology and those involving histological and serological techniques (antigens and other immunological reactions).
2. Animal. Positions concerned with the anatomy, physiology, behavior, health and care of laboratory animals; tests and experiments involving laboratory animals, including operative and autopsy techniques, gross pathology techniques, special breeding or feeding procedures, methods peculiar to the collection and examination of animal fluids or tissue, techniques for administering drugs or other chemical agents; and observations of physiological and behavioral effects of various conditions, agents, and stimuli on laboratory animals.
3. Biochemistry. Positions concerned with the techniques and equipment peculiar to chemical analysis of biological substances or to the study of biochemical relationships. Such work may include, for example, chemical and DNA analysis of blood, urine, and other body fluids and substances; procedures for testing the chemistry of food, drugs, or other material; or methods for studying physiological relationships.
4. Insect. Positions involved in the classification, anatomy, physiology, habit and life history, and response studies of insects and related animal forms such as spiders and mites; studies of the measures used to control insects injurious to agricultural crops, animals, or man;



development and testing of more effective insecticides, formulations, biological controls, etc.; evaluation of plant varieties for resistance to insect attack; development of methods for conducting insect surveys to establish criteria for forecasting outbreaks; utilization of parasites, predators, and diseases for controlling destructive insects; and the use of insects to control weeds.

5. Plants. Positions concerned with the breeding, selecting, and testing of field crops, fruits, vegetables, ornamentals, etc.; improvement of management practices to attain increased yield, improved quality, adaptation to mechanization, and resistance to diseases, insects, heat, drought, cold, or other hazards; development of improved methods of controlling weeds and plant diseases; and similar work usually concerned with higher plant life.
6. Animal Science. Positions involved in the breeding, nutrition, and management of animals or poultry; the physiological aspects of animal or poultry reproduction, growth, metabolism, hormone action and environmental responses; improving management practices for the more economical production of meat and other products; and similar work concerned with domestic animals or poultry.
7. Soils. Positions concerned with the physical, chemical, and microbiological properties of soils, and the similar processes that take place in the soils; the response and behavior of plants to physical, chemical, and biological soil properties, climatic factors, etc.; and research and developmental efforts to improve cropping, cultural, and mechanical practices used in agricultural work through the study of soil and water.
8. Fisheries. Positions involved with research, conservation, production, and management of fishes, or fishery resources, or in the determination, establishment and application of biological facts, methods, techniques, and procedures necessary for research, conservation and management of fishes and other aquatic animals, such as crustaceans and mollusks, where the work does not principally involve management responsibility for the operation of fish hatcheries.
9. Wildlife. Positions concerned with research, conservation and management of wildlife; the control of wildlife; or the determination, establishment and application of the biological facts, principles, methods, techniques, and procedures necessary for the conservation, management, and control of wildlife.

Work leader positions. Add as a prefix the word Lead to the title of positions that meet the criteria of the [General Schedule Leader Grade Evaluation Guide](#).

Supervisory positions. Add as a prefix the word Supervisory to the title of positions that meet criteria in the appropriate [supervisory guide](#).

## EVALUATING POSITIONS

The Biological Science Technician Series, GS-0404, is a one grade interval series for purposes of personnel administration. Additional information on the nature of technician work and criteria



for determining grade levels are contained in the [Grade Level Guide For Aid And Technician Work In The Biological Sciences, GS-0400](#).

In addition, a few positions in this occupation have been found to be mixed series in nature, i.e., in addition to the series controlling duties they include the performance of duties more appropriately classified elsewhere. For example, the "minor" duties may be more appropriately be classified in [Federal Wage System](#) occupations, another technician occupation of the [Biological Sciences Group, GS-0400](#), or other occupations from more unrelated occupational groups such as guard, or recreation. In such instances, users need to apply the grade level criteria for such occupations in addition to the criteria contained in this guide.

The policies and procedures of position classification, as outlined in the [Introduction to the Position Classification Standards](#) and in [The Classifier's Handbook](#), become especially critical for ensuring assignment of the proper grade level when the mixed series issue is present in classifying a position.