

## **1301 – Physical Science**

### Major Duties for This Position May Include:

- Conceive, plan, and conduct research on unexplored areas relating to safety and health where there is little or no theory to guide experimentation.
- Conduct studies that involve technological advances including new and/or improved equipment/systems; performance requirements; selection and use criteria; and methods for testing and evaluating hazard prevention systems.
- Serve as a resource both internal and external to the agency and provide consultation and advice to the agency in areas of personal research expertise.

### Related Competencies

- Creativity/Innovation
- Customer Service
- Data Analysis and Interpretation
- Decision Making
- Financial Management

### Basic Qualifications

Applicants must have a degree in physical science, engineering, or mathematics that included 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics.

**Or**

Have a combination of education and experience with education equivalent to one of the majors shown above that included at least 24 semester hours in physical science and/or related engineering science, plus appropriate experience or additional education.

### Minimum Qualifications

In additions to meeting the basic requirements above, applicants must meet the minimum qualifications requirement as defined below:

### **GS-11 Specialized Experience Requirements**

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-09 grade level in the Federal Service. Specialized experience for this position includes:

- Designing and development of experimental equipment, instrumentation, and prototype systems to monitor, measure and evaluate hazards.

### Or Education

Ph.D. or equivalent doctoral degree **or** three (3) full years of progressively higher-level graduate education leading to such a degree **or** LL.M., if related. **TRANSCRIPTS REQUIRED.**

### Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 36 semester hours (54 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED.**

## GS-12 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-11 grade level in the Federal Service. Specialized experience for this position includes:

- Performing scientific studies to evaluate chemical, radiological and/or biological hazards and to assess the performance of protective equipment.

**Note:** There is no substitution of education for specialized experience at the GS-12 level.

## GS-13 Specialized Experience Requirements

you must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-12 grade level in the Federal Service. Specialized experience for this position includes:

- Providing expert scientific leadership in planning, designing, implementing, and evaluating radiation studies involving exposure pathway analysis, source term estimation, and radiation dosimetry.

**Note:** There is no substitution of education for specialized experience at the GS-13 level.

## GS-14 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-13 grade level in the Federal Service. Specialized experience for this position includes:

- Providing research and science support information for program policy management of complex or interdisciplinary nature
- Identifying developmental and training needs of managers
- Participating in policy and guidance development to enable organizational implementation of policy or program initiatives

**Note:** There is no substitution of education for specialized experience at the GS-14 level.

## GS-15 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-14 grade level in the Federal Service. Specialized experience for this position includes:

- Performs management planning duties such as concept development, master integration planning, and programming design for programs or projects, considering feasibility, costs, and economics
- Conceives, plans, conducts and reviews work in areas where there is little theory to guide efforts

**Note:** There is no substitution of education for specialized experience at the GS-15 level.

**Experience** refers to paid and unpaid experience. Examples of qualifying unpaid experience may include volunteer work done through National Service programs (such as Peace Corps and AmeriCorps), as well as work for other community-based philanthropic and social organizations. Volunteer work helps build critical competencies, knowledge, and skills; and can provide valuable training and experience that translates directly to paid employment. You will receive credit for all qualifying experience, including volunteer experience.