

# Supplemental Qualification Standards for the U.S. Department Of Agriculture, Forest Service and the U.S. Department of the Interior

## GS-0401 Fire Management Specialist

This document supplements the requirements outlined in the *Qualification Standards for General Schedule Positions Operating Manual* published by the U. S. Office of Personnel Management and must be used in conjunction with those requirements. Additional or clarifying information can be obtained from the Operating Manual.

### Basic Requirements:

A. Degree: biological sciences, agriculture, natural resources management, or related discipline appropriate to the position being filled.

**-OR-**

B. Combination of education and experience: courses equivalent to a major in biological sciences, agriculture or natural resources management, or at least 24 semester hours in biological sciences, natural resources, wildland fire management, forestry, or agriculture equivalent to a major field of study, plus appropriate experience or additional education that is comparable to that normally acquired through the successful completion of a full 4-year course of study in the biological sciences, agriculture, or natural resources.

Applicants who meet the criteria for Superior Academic Achievement qualify for positions at the GS-7 level.

### Specialized Experience:

For positions at GS-7 and above, one year of specialized experience at the next lower grade level is required in addition to meeting the basic requirements.

For GS-7: Experience that demonstrated an understanding of fire behavior relative to fuels, weather, and topography and how fire affects natural and cultural resources. Typical assignments include:

- Participating in implementing prescribed fire or fire use plans to ensure resource objectives can be met from a fire management standpoint.
- Developing initial attack incident management strategies and tactics to meet the stated resource objectives.

For GS-9: Experience in at least two of the following three categories:

1. Experience that demonstrated understanding of fire effects on cultural and natural resources. The assignments must have shown participation in activities such as:

- Developing fire management plans to ensure resource objectives can be met from a fire

- management standpoint; or
  - Conducting field inspections before and/or after prescribed fires or wildland fires to determine if defined resource objectives have been met.
2. Prescribed fire/fuels management - experience in activities such as:
- Professional forest or range inventory methods and procedures (e.g., Brown's planar intercept for dead and down fuels; live fuel loading assessments), or
  - Analysis of fuel loadings and determination of appropriate fuel treatment methods and programming, or
  - Evaluating prescribed fire plans or fire management plans to ensure fire containment is possible and identify appropriate suppression contingencies if containment is not obtained.
3. Fire management operations - analyzing and applying fire management strategies, plus experience in at least four of the following activities:
- Mobilization and dispatch coordination
  - Fire prevention
  - Training
  - Logistics
  - Equipment development and deployment
  - Fire communications systems
  - Suppression and preparedness

For GS-11 and above: Experience must have included all of the fire program management elements as described below:

- Reviewing and evaluating fire management plans for ecological soundness and technical adequacy;
- Conducting field inspections before and after prescribed or wildland fires to determine if resource objectives were achieved and/or to evaluate the effectiveness of actions taken; and
- Developing analyses on the ecological role of fire and its use and/or exclusion, and smoke management.

In addition to fire program management, appropriate experience must have included either prescribed fire/fuels management - **OR** - fire management operations as described below:

Prescribed fire/fuels management - experience in a broad range of activities such as:

- Professional forest or range inventory methods and procedures (e.g., Brown's planar intercept for dead and down fuels; live fuel loading assessments);
- Analysis of fuel loadings and determination of appropriate fuel treatment methods and programming;
- Land use planning and environmental coordination;
- Evaluation of prescribed burn plans or fire management plans to ensure fire containment is possible and identification of appropriate suppression contingencies if containment is not obtained.

Fire management operations - analyzing and applying fire management strategies, plus experience in at least five of the following activities:

- Mobilization and dispatch coordination
- Fire prevention and education
- Training
- Logistics
- Equipment development and deployment
- Fire communication systems
- Suppression and preparedness
- Aviation

## **Medical and Physical Requirements**

Medical and physical requirements must be met for positions that have duties that are of an arduous or hazardous nature.

## Policy Interpretation of the Supplemental Qualification Standard for the GS-0401 Fire Management Specialist

This is to be used in conjunction with the GS-0401 Fire Management Specialist Standard.

### Basic Requirements

**A. Education: Successful completion of a full 4-year course of study in an accredited college or university leading to a bachelor's or higher degree in biological sciences, agriculture, natural resource management, or related discipline appropriate to the position being filled. The following majors are creditable:**

1. Disciplines identified in the 400 Professional and Scientific Series Standard for General Biological Science/Natural Sciences:

Agriculture	Agricultural Extension
Agronomy	Animal Science
Biochemistry	Biological Sciences (General)
Biometrics (includes Applied Forestry*)	Botany
Ecology	Entomology
Fishery Biology (includes marine/aquatic)	Forestry
General Fish & Wildlife Administration	Genetics
Horticulture	Microbiology
Natural Resources Management	Pharmacology
Physiology	Plant Pathology
Plant Physiology	Plant Protection & Quarantine
Rangeland Management	Soil Conservation
Soil Science	Toxicology
Wildlife Biology	Wildlife Refuge Management
Zoology	

2. Natural Resource related disciplines as determined by Fire Management subject matter experts to meet the Natural Science Group GS-400

Chemistry	Earth Sciences
Environmental Sciences**	Geology
Hydrology	Meteorology
Outdoor Recreation***	Physical Geography*
Physics	Watershed Management
Fire Management/Fire Science	

A graduate degree in any of the disciplines listed above will meet basic qualifications regardless of the undergraduate degree (a bachelor's degree in English, for example).

\* GIS is creditable when identified as Biometrics/Applied Forestry/Natural Resources e.g. FOR xxx, Survey of GIS in Nat. Resources; GEOG xxx Hydrologic Appl. of GIS & Remote Sensing; NR xxx Adv. GIS Appl. in Fire Ecology & Mgmt. It is not creditable if the course is designated as part of a discipline not listed above (e.g. Computer Science course CS-xxx, Inter Arcview).

\*\*An Environmental Science degree does not equate to an environmental or natural resources policy degree.

\*\*\*Natural Resources emphasis

Page 1 Notes for reference:

A.1. All disciplines in A.1 above were obtained from series listed in the Biological Sciences, GS-400 or within an individual occupational series. For example, natural resources management was taken from the GS-480, Fish and Wildlife Administration Series, and GS-454-Rangeland Management Series.

Subject matter experts from the five wildland firefighting agencies developed A.2. Related Disciplines. Physical sciences are mentioned throughout the individual occupational series for the 400 family. In the draft Job Family Standard for Professional Work in the Natural Sciences Group, GS-0400, the term “natural resources” is defined as “all the things in our physical environment that we use to meet our needs and wants.” It also quotes: “The most commonly thought of natural resources are metals and nonmetals, energy sources, water, land, food, wild plants and animals, and soils. Work in natural resources sciences spans a broad range of disciplines and specialty areas. Some natural resource scientists are engaged in broad research and development activities that, taken singly, would be classifiable to:

- A specific professional biological or agricultural science within the GS—0400 job family’ or
- A closely related science in another job family (e.g. physics).”

A.2. Individual Occupational Series:

- 401 includes chemistry
- 470 includes physical and earth sciences
- 480 includes chemistry

## **B. Combination of Education and Experience**

1. **Education Equivalent.** The OPM Qualification Standards for General Schedule Positions, Group Coverage Qualification Standards for Professional and Scientific Positions, requires that an applicant possess a core of educational credit. This course work plus additional education and/or experience meets the qualifications for a GS-401 under paragraph B of the individual occupational requirements.

a. **College/University.** Universities regularly credit continuing education coursework even when the student is not enrolled in a degree program. These courses go through the same strenuous curriculum review as general coursework. The following criteria will be used to determine eligibility for all college/university credits:

1. The course is from an **accredited** University. To verify a particular school’s accreditation status go to [www.ope.ed.gov/accreditation](http://www.ope.ed.gov/accreditation).

**AND**

2. The course is offered in a discipline as identified in A. under Basic Requirements. It is the responsibility of the college/university to determine the discipline; the Human Resources Staff will credit all courses on a transcript (or equivalent documentation) in disciplines defined in A. toward the GS-0401 Fire Management Specialist series.

**Examples, as creditable:**

<b>Course #</b>	<b>Course Title (Discipline)</b>
ENVS xxx	Environmental Hydrology (Environmental Science)
Soil xxx	Soil & Env. Physics (Soil Science)
FOR xxx	Env. Conservation (Forestry)
WFSC xxx	Wildlife and Changing Environment (Wildlife Science)
FW xxx	Survey of GIS in Nat. Resources (Fish & Wildlife)
GEOG xxx	Decision-making NR Mgt. (Geography)
F xxx	Decision Methods for Fire Managers (Forestry)
FOR xxx	Professional Writing for Natural Resources Sciences (Forestry emphasis)

**Examples, not creditable:**

<b>Course #</b>	<b>Course Title (Discipline)</b>
POS xxx	Environmental Policy (Political Science)
SOC xxx	Environment & Society (Sociology)
HIST xxx	American Env. History (History)
STAT xxx	Data Analysis & Regression (Statistics)
ECON xxx	Natural Resources Economics (Economics)
ENG xxx	Professional Writing for Natural Resources Sciences (English emphasis)

**NOTE:** Generally, the course number includes the Department (discipline) for which the course was developed and whether the course is upper or lower division. Upper level courses are normally numbered 300 or 400, or begin with a C or D.

**AND**

3. Documentation verifying the coursework was completed and met accreditation and discipline (items B.1.a.1, B.1.a.2 above). The OPM Operating Manual for Qualification Standards for General Schedule Positions, General Policies and Instructions, Part E.4 describes proof as: an official transcript; statement from the institution's registrar, dean, or other appropriate official; or equivalent documentation.

**2. Specialized Experience.** Specialized experience is well defined in the Supplemental Qualifications Standard for the GS-0401 Fire Management Specialist. It is not required that this work be performed under the supervision of a professional employee, only that the work experience meets the definition required of this Standard.

If an employee or applicant has been performing the work described in the Supplemental Qualifications Standard, it is creditable even if that work was performed in a technical or administrative fire position.

For additional information on crediting experience, refer to OPM Qualifications Standards for General Schedule Positions, General Policies and Instructions, Part E.3(d) – (m).

## **Application of Education and Specialized Experience**

### **Creditable Education**

Education, to be creditable toward the 24-semester hour requirement, must meet the requirements of the *Qualification Standards for General Schedule Positions Operating Manual*, published by the U. S. Office of Personnel Management. The nature and quality of the education must have been such that it would serve as a prerequisite for more advanced study (graduate level or professional education). The education must be obtained from a college or university, applicable school within the college or university, or applicable curriculum at the college or university that has been properly accredited.

### **Education Equivalent to a Major Field of Study (24 semester hours)**

The **24 semester hours** must be obtained in biological sciences, natural resources, wildland fire management, forestry, or agriculture course work. Course titles and numbers may help determine whether a given course is upper or lower division. For example, courses numbered 100 or 200, beginning with A or B, or entitled “An Introduction To”, are almost always lower division courses. Conversely, courses numbered 300 or 400, or beginning with C or D are usually upper division courses. You can also refer to college course catalogs or consult with college advisors or officials to help you to determine the appropriate level of courses.

### **Additional Education**

In addition to courses in the major and related fields, a typical college degree would have included courses that involved analysis, written and verbal communication, critical thinking, planning research, etc. Therefore, creditable experience should have demonstrated similar skills and abilities.

The quality of the combination of education and experience must be sufficient to demonstrate that the applicant possesses the knowledge, skills, and abilities required to perform work in the occupation and is comparable to that normally acquired through the successful completion of a full 4-year course of study in the fields listed in section A or B of the Basic Requirements.

### **Appropriate Experience to Meet Basic Requirements**

An example of appropriate experience which would be comparable to the required college coursework may be that of a technician, at the GS-7 grade level or above, who is working under the supervision of a professional employee and is performing duties equivalent to an entry-level professional employee, in the field of biological sciences, agriculture, natural resources management, or fire management.

### **Examples (Section “B” of Basic Requirements)**

In accordance with direction in the *Qualification Standards for General Schedule Positions Operating Manual*, 30 semester hours (or 45 quarter hours) is comparable to one year of college and can be substituted for one year of experience.

**Example 1:** An applicant has 60 semester hours of creditable education, which includes the required 24 semester hours equivalent to a major field of study. The applicant still must have 2

years of appropriate experience to meet the basic requirements. This combination equals 100 percent.

**Example 2:** An applicant has only the 24 semester hours of creditable education, which includes the required 24 semester hours equivalent to a major field of study. The applicant still must have 3 years, 2½ months of appropriate experience to meet the basic requirements. This combination equals 100 percent.

**Example 3:** An applicant has 48 semester hours of creditable general education from a local university. The applicant still must have 2 years, 5 months of appropriate experience to meet the basic requirements. This combination equals 100 percent.

### **Specialized Experience**

According to the Qualification Standards for General Schedule Positions Operating Manual, one-grade interval experience may be qualifying for two-grade interval positions, provided that the experience demonstrated the Knowledge, Skills, and Abilities required to perform the work successfully. This is true for either lateral or promotion actions. The basic requirements for the type and level of experience and/or education apply to all applicants, whether their experience has been in the same occupation as the position being filled or in related occupational field. Since two-grade interval positions may differ significantly in the nature of the work, it is important that applicants be evaluated on the “knowledge required” to perform the work.