Memorandum

To: Solicitor
   Inspector General
   Assistant Secretaries
   Heads of Bureaus and Offices

From: Sharyn A. Grigsby
      Director, Office of Human Resources

Subject: Departmental Policy on Qualification Requirements for GS-0401 Fire Program Management

The Office of the Assistant Secretary - Policy, Management and Budget, Office of Human Resources, is issuing a new Personnel Bulletin to all Departmental offices establishing policy on the qualification requirements for GS-0401 Fire Program Management positions. This new guidance provides for systematic practices and procedures across the entire Department. The new guidance is intended to clarify program requirements implemented by the supplemental qualification standard for the 0401 series approved by the United States Office of Personnel Management on October 1, 2002.

The attached Personnel Bulletin describes to all Bureaus and equivalent organizations an important employment program. All Department Human Resources Offices will now use this guidance when determining eligibility for Fire Program Management positions.

If you have any questions, please contact Michael Ballew on (202) 513-0755 or by e-mail at Michael_Ballew@ios.doi.gov.

Attachment

cc: Deputy Secretary
   Chief of Staff
   Bureau/Equivalent Office Human Resources Officers
PERSONNEL BULLETIN NO: 07-13

SUBJECT: Qualification Requirements for GS-0401 Fire Program Management

1. This Personnel Bulletin clarifies the specific qualification requirements for the GS-0401 series, Fire Program Management positions, at the U. S. Department of the Interior (Interior) as outlined in the U. S. Office of Personnel Management (OPM) Operating Manual for General Schedule Positions and the Department’s Supplemental Qualifications Standard.


3. Policy: The Department’s Supplemental Qualification Standard was developed under the leadership of Interior, Department of Agriculture’s (USDA) United States Forest Service and with concurrent advice from the Bureau of Land Management, National Park Service, Fish and Wildlife Service, Bureau of Indian Affairs and OPM. The goal of this supplemental standard is to ensure consistent application in qualifying and hiring employees for key fire management specialist positions under the 0401 series in these two Departments. This supplemental standard is to be used in conjunction with the authorities and references cited above in paragraph 2 and will be used for competitive and non-competitive actions.

4. Basic Qualification Requirements: The OPM Qualification Standard for the 0401 series include a “positive” education requirement as stated below. It is the applicant’s responsibility to provide documentation or proof that he or she has met the applicable educational provisions described in this supplemental standard. No applicant may be placed in a position covered by the 0401 Qualification Standard for Fire Program Management without meeting either A or B below. Attachment 1 to this Personnel bulletin clarifies further the use of related courses of study.

   A. Degree: Biological sciences, agriculture, natural resources management, chemistry or related disciplines appropriate to the position.

   -OR-
B. Combination of education and experience: Courses equivalent to a major course of study in biological sciences, agriculture or natural resources management, chemistry 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.

5. Combination of education and experience: When combining education with experience, first determine the applicant's total qualifying education as a percentage of the education required for the grade level; then determine the applicant's experience as a percentage of the experience required for the grade level; then add the two percentages. The total percentages must equal at least 100 percent to qualify an applicant for that grade level. (Note: 30 semester hours or 45 quarter hours is generally the equivalent of 1 year of full-time undergraduate education)

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

6. Specialized Experience: Experience that equipped the applicant with the particular knowledge, skills and abilities to perform successfully the duties related to fire program management. To be creditable, specialized experience must have been equivalent to at least the next lower grade level in the normal line of progression for the occupation in the organization.

For positions at GS-7 and above, one year of specialized experience equivalent to at least the GS-05 level is required in addition to meeting the basic entry qualification 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

7. Documentation: The Office of Personnel Management revised the Operating Manual for Qualifications Standards for General Schedule Positions, Part E.4 – E.4(a) of the General Policies and Instructions effective February 15, 2005, to address the “Acceptability of Higher Education for Meeting Minimum Qualification Requirements.” OPM revised the education requirement provisions based on Congressional, Department of Education, and OPM concern with the employment of people in the Federal government who have college degrees from non-accredited sources. Effective February 15, 2005, the issuance of the revised OPM qualifications standard restricted qualifying education (primarily) to colleges, universities and institutions. Anyone placed in a GS-0401 series position on or after February 15, 2005, had or has met the OPM qualifications standard in place as of that date.

While this revision applies to all GS positions, it has a significant impact on positions covered by the Department’s Supplemental Standard for Fire Management Positions under the GS-0401 Fire Management series. Prior to February 15, 2005, the OPM Operating Manual for GS Positions allowed credits from the USDA Graduate School, or other institutions determined to be equivalent on the same basis as study in accredited colleges, universities and institutions. At that time National Wildfire Coordinating Group (NWCG) was determined to be an equivalent institution. NWCG courses taken pre-February 15, 2005 were creditable toward the GS-0401 series education qualification requirements with the proviso that the employee provided appropriate documentation or proof that he or she met the applicable educational provisions and the individual was already in the GS-0401 position as of February 14, 2005.

When the original supplemental standard for Fire Management Specialist was approved on July 29, 2002, the United States Department of Agriculture and the Department of the Interior worked jointly to create a draft interpretative guidance for implementation. As a result of the revision, beginning on February 15, 2005 Departmental Human Resources Offices can now credit only educational coursework that is listed on an official transcript from an accredited institution, college, or university. This means that NWCG course work, and the Technical Fire Management (TFM) coursework that is not listed on an official transcript, or equivalent documentation, can not be used even though prior to February 15, 2007, this course work was allowed.

1 In lieu of official transcripts from a college, university or institution, equivalent documentation is defined as a certificate or letter of completion signed by a professor, dean, or department head of an accredited college, university or institution. This certificate or letter of completion must indicate the name of the accredited college, university or institution, the name of the course, the academic level of the course (upper or lower division as indicated by the college, university or institution), and the number of semester hours awarded.
Employees who met qualification requirements using NWCG courses, without academic transcripts, prior to February 15, 2005 and were either appointed, promoted or reassigned into the GS-0401 by that date as Fire Management Specialists are not affected by these changes as long as they remain in their current positions. It must be noted that their current status under the GS-0401 standard is limited to the position and grade they currently hold. These employees must meet the combination of education and experience provisions, along with the positive education requirements for the GS-0401 series based on the new criteria if they wish to be reassigned, detailed or referred from a merit promotion certificate. The only exception would be a “career-ladder” promotion based on the competition held prior to February 15, 2005.

For those individuals who do not have a degree in one of the qualifying academic disciplines, but who may qualify by a combination of education and experience, the following guidance applies when determining qualifying education:

A. Courses supported by a transcript or equivalent documentation in which a minimum of 24 semester hours is in one or more of the disciplines. The 24 semester hours must include upper division courses. The number of upper division courses can vary as long as progression toward a major is displayed. It is the responsibility of the human resource specialist to determine the qualifying nature of this progression. They can include courses entirely from one discipline, e.g., for example, Soil Science; or a mixture of closely related disciplines, e.g., for example, Forestry, Range Management, and Ecology.

B. College transcripts and equivalent documentation which support only lower division education, such as that derived through an Associates Degree does not meet the basic education requirement. 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 and will also be considered as creditable provided transcripts or certificates of completion are submitted with the application. The Department encourages all employees covered by the 0401 Supplemental Qualification Standard to purchase these credits for permanent documentation in their Official Personnel Folder (OPF).

All documentation related to the “positive” education requirement of the 0401 series will be maintained in the employee’s OPF, either paper or electronic, in accordance with the provisions of the OPM Guide to Personnel Record Keeping.

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

**Program Oversight and Evaluation:** Bureaus and equivalent organizations will include review of the Fire Program Management positions under the 0401 series in their internal personnel management evaluations programs.
8. The Department point of contact for this policy is Michael Ballew, and he can be reached on (202) 513-0755, or via email at Michael_Ballew@ios.doi.gov.

Sharlyn A. Grigsby
Director, Office of Human Resources
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, university or institution 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 which may be used to meet the basic requirement:

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 which may be used to meet the basic requirement:

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

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2 An Environmental Sciences degree does not equate to an environmental or natural resources policy degree
3 Natural Resources emphasis
4 GIS is creditable when identified as Biometrics, Applied Forestry, Natural Resources, e.g., FOR xxx, Survey of GIS in Natural Resources; GEOG xxx Hydrologic Application of GIS & Remote Sensing; NR xxx Advanced GIS Applications in Fire Ecology & Management. 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 Arview.
A graduate degree in any of the disciplines listed above will meet basic qualifications regardless of the undergraduate degree. All disciplines in A.1 above were obtained from series listed in the Biological Sciences, GS-0401 or within an individual occupational series. For example, natural resources management was taken from the GS-0480, Fish and Wildlife Administration Series, and GS-0454, 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 0400 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:

- 0401 includes chemistry
- 0470 includes physical and earth sciences
- 0480 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-0401 under paragraph B of the individual occupational requirements. 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 or institutional credits:

   1. The course is from an accredited university. To verify a particular school’s accreditation status go to 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 or institution 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:\footnote{5}

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title (Discipline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS xxx</td>
<td>Environmental Hydrology (Environmental Science)</td>
</tr>
<tr>
<td>SOIL xxx</td>
<td>Soil &amp; Environment Physics (Soil Science)</td>
</tr>
<tr>
<td>FOR xxx</td>
<td>Environment Conservation (Forestry)</td>
</tr>
<tr>
<td>WFSC xxx</td>
<td>Wildlife and Changing Environment (Wildlife Science)</td>
</tr>
<tr>
<td>FW xxx</td>
<td>Survey of GIS in Natural Resources (Fish &amp; Wildlife)</td>
</tr>
<tr>
<td>GEOG xxx</td>
<td>Decision-making Natural Resources Management (Geography)</td>
</tr>
<tr>
<td>F xxx</td>
<td>Decision Methods for Fire Managers (Forestry)</td>
</tr>
<tr>
<td>FOR xxx</td>
<td>Professional Writing for Natural Resources Sciences (Forestry emphasis)</td>
</tr>
</tbody>
</table>

Examples, not creditable:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title (Discipline)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS xxx</td>
<td>Environmental Policy (Political Science)</td>
</tr>
<tr>
<td>SOC xxx</td>
<td>Environment &amp; Society (Sociology)</td>
</tr>
<tr>
<td>HIST xxx</td>
<td>American Environment History (History)</td>
</tr>
<tr>
<td>STAT xxx</td>
<td>Data Analysis &amp; Regression (Statistics)</td>
</tr>
<tr>
<td>ECON xxx</td>
<td>Natural Resources Economics (Economics)</td>
</tr>
<tr>
<td>ENG xxx</td>
<td>Professional Writing for Natural Resources Sciences (English emphasis)</td>
</tr>
</tbody>
</table>

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.

\footnote{5} Generally, the course number includes the Department (discipline) for which the course was developed and whether the course is upper or lower division.
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 meet one of the following:

1. **Conventional** - Obtained from a college, university or institution, applicable school within the above, or applicable curriculum at the college, university or institution that has been properly accredited.

2. **Agency courses which are creditable through a college, university or institution** - These courses contain content developed or endorsed by an NWCG member agency. An agency or university provides instructors for these courses or may use contractors to teach them through agreements. Through an agreement with an accredited college, university or institution, students can purchase credits. The acceptable format for validating the course completion is a college transcript or equivalent documentation showing completion of the course and the amount of credit awarded by the school. It should be noted that some courses are comprised of modules, for which each individual module can be awarded credit by the school as evidenced by the college transcript. It is up to the servicing Human Resources (HR) Specialist to make the final determination as to whether a course constitutes creditable education from the standpoint of contributing to a “major field of study”.

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 as noted above. You can 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.

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 performing duties equivalent to an entry-level professional employee, in the field of biological sciences, agriculture, chemistry, natural resources management, or fire management. In accordance with direction in the Qualification Standards for General Schedule Positions Operating Manual, 30 semester hours or equivalent quarter hours is comparable to one year of college and can be substituted for one year of experience. For example, an applicant has 60 semester hours of creditable education, which includes the required 24 semester hour’s 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.

**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.

Other education creditable towards 24 semester hours requirement: Prior to the OPM changes to the Operating Manual for Qualifications Standards for General Schedule Positions, Part E.4 – E.4(a) of the General Policies and Instructions Creditable education from other than an accredited institution of higher learning that meets the requirements of the qualifications standards. To meet the 24 semester hour or equivalent requirement, the other education must be equivalent to course work in a Bachelor’s of Arts or Bachelor’s of Science degree with a major course of study in biological sciences, natural resources, chemistry, wildland fire management, forestry, or agriculture. Most “technology” type coursework will not meet this requirement.

Technical Fire Management Courses: All TFM courses are creditable toward meeting the 24 semester hours required of the 0401 Qualification Standard if documented on either a transcript or a certificate with the name of the accredited college, university or institution (the Department considers this an acceptable form of “equivalent documentation”). The documentation may note all 18 semester hours or the partial credit which the student may purchase for academic credit. These credits are considered as “upper division” course work for the purposes of this supplemental standard.

A. TFM courses creditable toward meeting the required 24 semester hours under the 0401 Qualifications Standard (these meet the current documentation requirements noted in the OPM

<table>
<thead>
<tr>
<th>Module I/IA</th>
<th>Statistics/Computer and Math</th>
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<tbody>
<tr>
<td>Module II</td>
<td>Economics</td>
</tr>
<tr>
<td>Module III</td>
<td>Fuels Management</td>
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<tr>
<td>Module IV</td>
<td>Fire Ecology</td>
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<tr>
<td>Module V</td>
<td>Fire and Land Management</td>
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<tr>
<td>Module VI</td>
<td>Final Projects Reviews</td>
</tr>
</tbody>
</table>

B. NWCG Courses listed below were initially determined to be creditable toward meeting the required 24 semester hours under the 0401 Qualifications Standard. These met the documentation requirements prior to the revision of the OPM Operating Manual for Qualifications Standards for General Schedule Positions, Part E.4 – E.4(a) of the General Policies and Instructions, effective February 15, 2005. In order to be creditable after the February 15, 2005 revisions the NWCG courses must be listed on a transcript or equivalent documentation from an accredited college, university or institution. The transcript or equivalent documentation must note the credited academic hours for each course and the upper division or lower division level of academic study for each course. Other NWCG courses, not listed in the table below, may be used to meet the basic requirements of the 0401 Qualification Standard; they must be listed on a transcript or equivalent documentation from an accredited college, university or institution in order to be creditable:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIEM</td>
<td>Fire in Ecosystem Management</td>
<td>1 Semester Hour</td>
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<tr>
<td>FML</td>
<td>Fire Management Leadership</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>FPM</td>
<td>Fire Program Management</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>LFML</td>
<td>Local Fire Management Leadership</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>NFMAS</td>
<td>National Fire Management Analysis System</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>RX-450</td>
<td>Smoke Management Techniques</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>RX-540</td>
<td>Applied Fire Effects</td>
<td>1 Semester Hour</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Hours</td>
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<tr>
<td>RX-590</td>
<td>Prescribed Fire Behavior Interpretation (to be combined with S-590)</td>
<td>2 Semester Hours</td>
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<tr>
<td>S-490</td>
<td>Advanced Wildland Fire Behavior Calculations</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>S-491</td>
<td>National Fire Danger Rating System</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>S-492</td>
<td>Long Term Fire Risk Assessment</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>S-493</td>
<td>Fire Area Growth Simulation</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>S-520</td>
<td>Advanced Incident Management</td>
<td>2 Semester Hours</td>
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<tr>
<td>S-580</td>
<td>Advanced Fire Use Applications (National Parks &amp; Wilderness Fire Management)</td>
<td>1 Semester Hour</td>
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<tr>
<td>S-590</td>
<td>Fire Behavior Interpretation</td>
<td>2 Semester Hours</td>
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<tr>
<td>S-620</td>
<td>Area Command</td>
<td>1 Semester Hour</td>
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<td>P-151</td>
<td>Wildfire Origin and Cause Determination</td>
<td>1 Semester Hour</td>
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<tr>
<td>RX-300</td>
<td>Prescribed Fire for Burn Bosses</td>
<td>1 Semester Hour</td>
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<tr>
<td>RX-340</td>
<td>Introduction to Fire Effects</td>
<td>1 Semester Hour</td>
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<tr>
<td>S-190/290</td>
<td>Introduction to fire Behavior combined with Intermediate Wildland Fire Behavior</td>
<td>1 Semester Hour</td>
</tr>
<tr>
<td>S-390</td>
<td>Introduction to Wildland Fire Behavior Calculations</td>
<td>1 Semester Hour</td>
</tr>
</tbody>
</table>