

The United States Office of Personnel Management (OPM) maintains qualification standards for General Schedule Positions in employment of the United States government, including that of **GS-470: Soil Science Series**.

[Qualification Standards for GS-470: Soil Science Series](#)

The following lists of 1] Soil Courses and 2] Biological, Physical, and Earth Science Course address the OPM standard requirements. Course names may vary from school to school. The lists may not include all courses available at any particular school. Hence, it may be necessary for NRCS Human Resource staff (HR) to consult with the State Soil Scientist and/or the University Liaison to the National Cooperative Soil Survey (NCSS) to determine relevance of a course in question to the OPM standard requirements during hiring procedures.

A third list, Supplemental Course Areas of Study, is included to show course work the Soil Survey Division of NRCS believes would help soil scientist performance in the NCSS. This list of course work does not apply to the OPM standards.

It is suggested that this information be shared with your HR staff, land grant institutes, and other NCSS cooperators.

List 1-Soils Courses

- Environmental soil science
- Forest soils
- Hydric soils
- Introductory soil science
- Pedology
- Soil and plant relationships
- Soil biology
- Soil chemistry
- Soil conservation/management
- Soil fertility
- Soil genesis
- Soil geomorphology
- Soil judging (related)
- Soil mechanics
- Soil microbiology
- Soil micromorphology
- Soil mineralogy
- Soil physics
- Soil quality
- Soil taxonomy
- Special studies in soils (case by case for relevance)

List 2- Biological, Physical, and Earth Science Courses

- Agronomy

Biology
Botany
Chemistry (basic)
Chemistry (bio)
Chemistry (Organic)
Climatology
Crop sciences
Ecology (basic)
Ecology (benthic)
Ecology (forest)
Ecology (rangeland)
Ecology (wetlands)
Environmental sciences
Geology
Geomorphology
Horticulture
Hydrology (surface, ground water)
Microbiology
Physics
Plant physiology
Plant sciences
Turf courses (agrostology)
Waste management

List 3-Supplemental Course Areas of Study

GIS applications
Interpersonal communication skills
Land use planning
Mathematics (algebra, trigonometry, geometry)
Modeling
Remote sensing
Speech, public speaking
Statistics
Team building skills
Writing skills (professional and other)