

## Sciences (Biology/Chemistry/Physics) Skills

Use the following lists to show your skills on your resume and cover letter. You may have additional skills not shown on this list. List your skills in a separate Skills/Qualifications section on your resume. Highlight the most relevant skills in the middle paragraph of your letter.

### Sample Skills/Skill Headings

|   |  |                              |
|---|--|------------------------------|
| Advocacy  | Fundraising & Development              | Presentation/Public Speaking |
| Animal Care                                       | Grant Development                      | Program Development          |
| Communication                                     | Lab Equipment Operation                | Proposal Development         |
| Conservation (Land, Water)                        | Laboratory Research                    | Public Affairs/Relations     |
| Data Collection                                   | Monitoring (Watershed, Wildlife, etc.) | Recycling                    |
| Data Analysis & Assessment                        | Nature Conservancy                     | Researching                  |
| Ecological Research                               | Organization/Planning                  | Sampling                     |
| Education (Environmental, Outdoor/Resource, etc.) | Outreach/Education                     | Restoration/Preservation     |
| Environmental Justice                             | Parks & Outdoor Recreation             | Watershed Management         |
| Environmental Protection                          | Plant & Animal Identification          | Writing/Publishing           |

### Tools/Techniques

|   |  |
|---|--|
| Basic First Aid, CPR certifications             | Electrophoresis  |
| ArcGIS  | Chromatography   |
| GPS units                                       | Electronic balances  |
| All-Terrain Vehicle (ATV) Safety Education Card | Fluorometers   |
| Digital camera                                  | Bioanalyzers   |
| Radiotelemetry                                  | Flow cytometers  |
| AutoCAD   | Aerobic growth chambers  |
| Scanning electron microscope                    | Samplers & analyzers (such as water/air)   |
| Steam autoclaves & sterilizers                  | Digital survey meters  |
| Centrifuges                                     | Hand tools: brush cutters, loppers, machetes, handsaws, hand & backpack sprayers |
| Drying ovens                                    |  |
| Spectrophotometers                              |  |

### Relevant Coursework

|                      |                       |              |
|----------------------|-----------------------|--------------|
| Anatomy & Physiology | Environmental Studies | Horticulture |
| Biology              | Gardening             | Microbiology |
| Botany               | Geography             | Oceanography |
| Cartography          | General Science       | Physics      |
| Chemistry            | Geology               | Surveying    |
| Ecology              | Herbalism             |              |

### Sample Skill Statements

Following is a long list of statements for specific skill sets in this field (scroll down to your interest area):

- **Lab Support**
- **Research/ Monitoring/ Data Collection**
- **Restoration/Conservation**
- **Education**
- **Outreach/Public Relations**
- **Fundraising and Development**
- **Computer & Language Skills**

### Lab Support

- Knowledge of chemical composition, structure, & properties of substances & the processes & transformations they undergo
- Knowledge of the uses of chemicals & their interactions, danger signs, production techniques, & disposal techniques

- Prepared compounds, solutions, & specimens for experiments, tests, & demonstrations
- Performed laboratory media & specimen preparation & mixing solutions
- Prepared samples & photomicrographs for testing & analysis
- Prepared collections of preserved specimens & microscopic slides
- Grew cultures under controlled conditions
- Dissected & examined specimens under microscope
- Set up equipment, prepared slides, & conducted tests
- Maintained & transferred stock cultures of organisms, utilizing aseptic techniques
- Measured (or weighed) compounds & solutions for use in testing
- Isolated, identified & prepared specimens for examination
- Obtained, cut, stained, & mounted biological material on slides following standard laboratory procedures
- Experience collecting tissue samples & tracking individual samples through a diagnostic procedure
- Analyzed samples of biological material for chemical content & reaction
- Prepared ecological kits to demonstrate polluting conditions in water, soil, & air
- Knowledge of plant & animal organisms, their tissues, cells, functions, & interactions with each other & the environment
- Cleaned and sterilized equipment
- Cleaned, maintained & prepared supplies & work areas
- Assisted in providing for a safe laboratory environment, including general cleanliness & security of lab/work areas
- Handled, stored, & disposed of hazardous materials in accordance with federal, state & local regulations
- Operated & maintained microscopes, centrifuges, spectrophotometers, & automated analyzers
- Set up, adjusted, calibrated, cleaned, & maintained laboratory & field equipment
- Calibrated microscopes & test instruments
- Trained in safety protocols & proper use of laboratory & personal protective equipment
- Knowledge & experience in safe laboratory procedures & practices
- Acquired, maintained & inventoried equipment, materials, supplies, live specimens, & written material
- Checked out tools, equipment, supplies, & materials to students
- Oriented students to safety protocols & proper use of lab & personal protective equipment
- Worked in consultation with faculty & lab staff to design, construct, & modify modules & experiments used in classrooms & labs
- Worked with students individually & in small groups, providing assistance in use of lab equipment & materials
- Displayed models, set up microscopes & set out specimens while assisting in open labs
- Set up laboratory experiences for students as required by faculty
- Prepared biological specimens of plant & animal life for use as instructional aides
- Familiar with lab tools/equipment: microscopes, steam autoclaves & sterilizers, drying ovens, centrifuges, spectrophotometers, electrophoresis, chromatography, electronic balances, fluorometers, bioanalyzers, flow cytometers, aerobic growth chambers, petri dishes, volumetric glassware, samplers & analyzers (such as water/air), digital survey meters
- Technology skills: scientific analysis software, map creation software (specify), MS Access, MS Excel, MS Word

### **Research/ Monitoring/ Data Collection**

- Familiar with basic field monitoring methods & basic flora & fauna identification
- Knowledge of Pacific Northwest ecology, botany & wildlife
- Familiar with data collection protocols
- Gathered information on local ecology (be specific)
- Accurately identified and classified plants
- Recorded identification information about incoming plants to botanical garden
- Fumigated, pressed, & mounted plant specimens, & maintained collection records of herbarium
- Recorded data accurately on maps, photos, & data forms
- Monitored experiments & recorded observations
- Recorded test data & prepared reports, summaries, & charts that interpreted test results
- Monitored and observed experiments, recording production & test data for evaluation by research personnel

- Monitored vegetation changes
- Performed water quality analysis
- Maintained records of techniques & procedures
- Kept detailed & accurate logs & records of observations, data, & findings
- Reviewed and recorded results of experiments
- Transferred data from field sheets to summary sheet
- Prepared charts & graphs from data samples
- Entered data from analysis of tests & results into computer
- Analyzed & interpreted experimental data & test results
- Conducted literature searches on research topics (name them) & summarized findings
- Assisted in the conduct of research, including the collection of information & samples of water, soil, plants, animals, & blood for testing
- Assisted with surveying, identifying, & recording types of vegetation at range elevation sites
- Identified, surveyed, & detected threatened & endangered plant species
- Assisted with invertebrate & vegetation surveys
- Observed, counted, & classified sex, age, & species of wildlife
- Gathered data on species & populations of trees, disease & insect damage, tree seedling mortality, & fire hazard conditions
- Kept records of plant growth, experimental plots, greenhouse activity, & use of insecticides
- Collected and analyzed air & water samples to monitor pollution levels
- Identified and studied various wildlife species (name them)
- Able to identify 20 birds by sight, song, & call
- Documented species, number present, & breeding status of 6 target species of forest birds
- Served as crew leader in environmental monitoring efforts
- Ability to navigate steep terrain using a topographical map & compass

### **Restoration/Conservation**

- Planned & employed soil management practices, such as crop rotation, reforestation, permanent vegetation, contour plowing, & terracing, as related to soil & water conservation
- Prepared planting plans & tracked results through use of GIS
- Farmed wildlife food plots with tractor & hand tools
- Maintained shrub & tree plantings & controlled weeds with herbicides
- Assisted with construction of habitat fencing, wildlife water sources, & other improvements (specify)
- Conducted vegetation identification & assessments
- Removed invasive vegetation & planted native plant species
- Used chain saws to cut invasive trees & shrubs
- Provided re-vegetation of restored areas, seed collection, & plant propagation
- Organized & participated in habitat restoration team work parties: helped purchase tools & native plants, removed invasive species, maintained walking paths, weeded flowerbeds
- Assisted with installation of a rain garden, 200 square foot eco-roof, & 256 square feet of raised beds, perennial bulbs, vines, & shrubs
- Assisted with harvesting, weeding, hot composting & worm composting, pruning & mulching in farm fields, gardens & landscaping
- Operated tractor, plow, disc, harrow, roto-tiller, drill & fertilizer spreader to plant & grow food & cover crops, trees & shrubs; cultured crops & trees by flood & sprinkle-irrigation, mechanical & chemical weed control
- Built beaver fences around vulnerable trees, dug erosion control "water bars" on trails
- Reconstructed retaining walls and other trail structures used to control erosion & mitigate safety concerns on trails
- Conducted trail maintenance tasks: cleaning water diverting structures, widening trail tread, brushing back trail corridors, & removing downed trees

### **Education**

- Skilled in outdoor, experiential teaching & mentoring
- Ability to clearly present & exchange technical/complex information

- Coordinated summer camp programs for children
- Assisted in documentation & evaluation of camp programs
- Assisted with & taught fish anatomy (or whatever) classes at elementary schools & outdoor education programs
- Comfortable working with children, parents, & teachers
- Participated in teacher workshops & collaborative meetings with education partners & groups
- Led nature walks and tours
- Ensured safety of guests during nature excursions
- Used multimedia to create & deliver presentations (be specific)
- Created exhibit signs with information about animals' regions of origin, diet, markings, & behavior
- Provided educational, recreational, & safe outdoor excursions
- Informed & educated park visitors about natural, historic, & cultural resources
- Delivered natural history interpretive talks & programs & led nature hikes & activities for the general public
- Conducted guided tours, educational programs, & special events (be specific)
- Developed & prepared materials for use in curriculum-based education programs relating to natural & cultural history
- Coordinated with team members to research & deliver presentation about forest types in the Pacific Northwest
- Presented thematic interpretive & educational programs, such as guided walks, talks, & evening programs, to a wide variety of audiences

### **Outreach/Public Relations**

- Awareness of public policy & environmental issues (name them)
- Led outreach events to connect community members to farm projects; conducted farm tours
- Recruited volunteers at community tabling fairs
- Coordinated cleanup events & outreach activities
- Produced direct mail and broadcast mail solicitations
- Managed online presence on Facebook, Twitter, YouTube
- Created brochures, newsletters, PowerPoint presentations, and blogs to explain issues and motivate involvement
- Conducted intakes and informational interviews over the phone and in person
- Disseminated information about community events, services, and issues
- Wrote and submitted newsletter articles and photos regarding volunteer activities
- Provided the public with program information when requested, in person or via telephone, mail, FAX, e-mail, or social media
- Assisted with writing & placing ads & program information in organization's newsletter & website, social media outlets, & newspapers
- Maintained organization (department) website, including electronic newsletter, blog, community calendar, and social media sites
- Coordinated & attended media events, including news conferences
- Wrote & published letters to the editor & worked on news releases
- Researched information on several renewable energy issues & created fact sheets & web content for use in advocacy work
- Drafted correspondence and website content (be specific)
- Assisted with website updating and maintenance of program outreach databases
- Wrote and sent out action alerts with a form letter to sign, then forwarded to policy maker
- Provided education to students & the community through presentations, workshops, and tabling events
- Facilitated student discussions on a variety of topics: conservation, environmental lobbying, renewable energy

### **Fundraising & Development**

- Managed all details of fundraising events, including invitations, advertising, ticket sales, speakers, decorations, seating, refreshments, cleanup

- Organized various (numerous) fundraising functions such as a walkathon, sports tournament, merchandise sales, book drive, benefit concert, used-items sale, raffle, online auction for products/services
- Spearheaded efforts that raised \$15,000 for a \_\_\_\_\_ fundraiser on campus
- Wrote a grant proposal for \_\_\_\_\_.
- Coordinated a fundraising/donation drive for students in need during holidays
- Solicited donations of clothing, household items, toys, gift cards, cash and other items from individuals, college departments and community businesses.
- Developed event sponsorships -- program advertisers and local businesses
- Crafted fundraising appeals, follow-ups, and thank you notes
- Maintained fundraising database
- Launched phone, letter, social media, and canvassing appeals
- Reviewed and evaluated 12 grants to faculty for classroom speakers
- Served on fundraising committee for local school
- Set dollar goals and timetables, prepared feasibility studies, trained volunteers, and organized fundraising events
- Maintained, stored, and organized development collateral materials, including display boards, signs, newspaper articles, notebooks of past events, etc.
- Recruited, trained, managed, tracked, scheduled, and acknowledged education volunteers and interns

### **Computer & Language Skills**

- Map creation software, Excel, Access, Google Apps, PowerPoint, Publisher, Photoshop, Word
- Fluent in reading, speaking, and writing Spanish
- Proficiency in written and oral communication in both Vietnamese and English
- Bilingual (Russian/English) and bi-culturally competent