## **Science Credentials and Authorizations**

Note: An 'X' indicates the area of assignment authorized; specific grade level restrictions appear in some of the boxes; otherwise see document in each section for grade level limitation such as General and Standard Credentials and supplementary and subject matter authorizations

| section for grade l                |                       | uch as General | and Standar |                       |                       | y and subject matter     |                       |                           |
|------------------------------------|-----------------------|----------------|-------------|-----------------------|-----------------------|--------------------------|-----------------------|---------------------------|
| <b>Type of Credential</b>          | Biological<br>Science | Chemistry      | Physics     | Earth/<br>Geosciences | Integrated<br>Science | Intro/General<br>Science | Intro Life<br>Science | Intro Physical<br>Science |
| Singl                              |                       | aching Crede   | ntials (ser |                       |                       | X - 12, and adult        |                       |                           |
| Science: Biological Science        | X                     |                |             |                       | K-12                  | X                        | X                     | X                         |
| Science: Chemistry                 |                       | X              |             |                       | K-12                  | X                        | X                     | X                         |
| Science: Physics                   |                       |                | X           |                       | K-12                  | X                        | X                     | X                         |
| Science: Geoscience                |                       |                |             | X                     | K-12                  | X                        | X                     | X                         |
| Foundational-Level General Science |                       |                |             |                       | K-8                   | X                        | X                     | X                         |
| Biological Science (Specialized)   | X                     |                |             |                       |                       |                          |                       |                           |
| Chemistry (Specialized)            |                       | X              |             |                       |                       |                          |                       |                           |
| Physics (Specialized)              |                       |                | X           |                       |                       |                          |                       |                           |
| Geoscience (Specialized)           |                       |                |             | X                     |                       |                          |                       |                           |
| Life Science                       | X                     |                |             |                       | 7-9                   | X                        | X                     |                           |
| Physical Science                   |                       | X              | X           | X                     | 7-9                   | X                        |                       | X                         |
|                                    | Standard              | Elementary     | Teaching    | Credentials (s        | ervice in gra         | des K- 8)                |                       |                           |
| MAJOR in biological science area   | X                     |                |             |                       | 7-8                   | X                        | X                     |                           |
| MAJOR in physical science area     |                       | *              | *           | *                     | 7-8                   | X                        |                       | X                         |
| MINOR in biological science area   | X                     |                |             |                       |                       |                          | X                     |                           |
| MINOR in physical science area     |                       | *              | *           | *                     |                       |                          |                       | K-8                       |
|                                    | Standard              | Secondary T    | eaching C   | Credentials (sei      | rvice in grad         | es 7 - 12)               |                       |                           |
| MAJOR in biological science area   | X                     |                |             |                       | 7-9                   | X                        | X                     |                           |
| MAJOR in physical science area     |                       | *              | *           | *                     | 7-9                   | X                        |                       | X                         |
| MINOR in biological science area   | X                     |                |             |                       |                       |                          | X                     |                           |
| MINOR in physical science area     |                       | *              | *           | *                     |                       |                          |                       | 7-8                       |

<sup>\*</sup> Service is restricted to the specific subject area of the major, minor, or supplementary/subject matter authorization listed on the credential

| Type of Credential           | Biological<br>Science | Chemistry | Physics | Earth/     | Integrated | Intro/General | Intro Life | Intro Physical |  |
|------------------------------|-----------------------|-----------|---------|------------|------------|---------------|------------|----------------|--|
|                              |                       |           |         | Geoscience | Science    | Science       | Science    | Science        |  |
| General Teaching Credentials |                       |           |         |            |            |               |            |                |  |
| Elementary (gr K-8)          | X                     | X         | X       | X          | 7-8        | X             | X          | X              |  |
| Junior High (gr 7-9)         | X                     | X         | X       | X          | 7-9        | X             | X          | X              |  |
| Secondary (gr 7-12)          | X                     | X         | X       | X          | 7-12       | X             | X          | X              |  |

## Credential Major, Minor, and Supplementary/Subject Matter Authorization Combinations

| Type of Credential   | Biological<br>Science | Chemistry | Physics | Earth / Geoscience | Integrated<br>Science | Intro/General<br>Science | Intro Life<br>Science | Intro Physical<br>Science |
|--|-----------------------|-----------|---------|--------------------|-----------------------|--------------------------|-----------------------|---------------------------|
| Single Subject - life<br>science; supplementary/<br>subject matter<br>authorization in specific<br>physical or earth/<br>geoscience                | X                     | *         | *       | *                  | 7-12                  | X                        | X                     | 7-8                       |
| Single Subject - physical<br>science; supplementary/<br>subject matter<br>authorization in specific<br>life science                                | X                     | X         | X       | X                  | 7-12                  | X                        | X                     | X                         |
| Standard Secondary -<br>major in biological<br>science; supplementary/<br>subject matter<br>authorization or minor in<br>specific physical science | X                     | *         | *       | *                  | 7-12                  | X                        | X                     | 7-8                       |
| Standard Secondary -<br>major in physical<br>science; supplementary/<br>subject matter<br>authorization or minor in<br>specific life science       | X                     | *         | *       | *                  | 7-12                  | X                        | X                     | X                         |
| Standard Secondary - major in geoscience or earth science; supplementary/subject matter authorization or minor in specific life science            | X                     |           |         | X                  | 7-12                  | X                        | X                     | X                         |

<sup>\*</sup> Service is restricted to the specific subject area of the major, minor, or supplementary/subject matter authorization listed on the credential

|  | Biological                              |   |                                     | Earth/                    | Integrated      | Intro/General          | Intro Life        | Intro Physical     |  |
|--|---|---|-------------------------------------|---------------------------|-----------------|------------------------|-------------------|--------------------|--|
| Type of Credential   | Science                                 | Chemistry                               | Physics                             | Geosciences               | Science         | Science                | Science           | Science            |  |
| Introductory Subject Matter Authorizations added to Single Subject, Multiple Subject Standard Elementary or Standard Secondary Teaching Credential, or Special Secondary (in academic subjects only) Teaching Credentials (authorize the holder to teach only the subject matter content typically included for that subject in curriculum guidelines and textbooks for study in grades 9 and below to students in preschool, kindergarten, grades 1–12, or in classes organized primarily for adults) |   |   |                                     |                           |                 |                        |                   |                    |  |
| Intro Science  | X                                       | <b>•</b>                                | <b>*</b>                            | X                         | 7-9             | X                      | X                 | X                  |  |
| Specific Subject Matter Authorizations added to Single Subject, Standard Secondary, Multiple Subject Standard Elementary or Standard Secondary Teaching Credential or Special Secondary (in academic subjects only) Teaching Credentials (service in grades K - 12)  |   |   |                                     |                           |                 |                        |                   |                    |  |
| Biological Science   | X                                       |   |                                     |                           |                 |                        | X                 |                    |  |
| Chemistry  |   | X                                       |                                     |                           |                 |                        |                   |                    |  |
| Geosciences  |   |   |                                     | X                         |                 |                        |                   |                    |  |
| Physics  |   |   | X                                   |                           |                 |                        |                   |                    |  |
| Plant Science ■  |   |   |                                     |                           |                 |                        |                   |                    |  |
| Introductory Supplementary Authorizations added to Single Subject or Standard Secondary Teaching Credential, or Special Secondary (in academic subjects only) Teaching Credentials (authorize the holder to teach only the subject matter content typically included for that subject in curriculum guidelines and textbooks for study in grades 9 and below to students in preschool, kindergarten, grades 1–12, or in classes organized primarily for adults)  |   |   |                                     |                           |                 |                        |                   |                    |  |
| Intro Science  | X                                       | •                                       | •                                   | X                         | 7-9             | X                      | X                 | X                  |  |
| Intro General Science  |   |   |                                     |                           | 7-9             | X                      | X                 | X                  |  |
| Intro Life Science   | X                                       | _                                       |                                     |                           |                 |                        | X                 |                    |  |
| Intro Physical Science   |   | •                                       | •                                   | X                         |                 |                        |                   | X                  |  |
| Specific Supplementary Teaching Credentials (author  | v Authorization<br>rize service in grad | NS added to Singi<br>des preschool, K - | le Subject or St<br>– 12, and adult | tandard Secondary T<br>s) | Teaching Creden | ntial, or Special Seco | ondary (in acadei | nic subjects only) |  |
| Biology  | X                                       |   |                                     |                           |                 |                        | X                 |                    |  |
| Chemistry  |   | X                                       |                                     |                           |                 |                        |                   |                    |  |
| Earth Science  |   |   |                                     | X                         |                 |                        |                   |                    |  |
| Physics  |   |   | X                                   |                           |                 |                        |                   |                    |  |
| Biological Science   | X                                       |   |                                     |                           |                 |                        | X                 |                    |  |
| Geosciences  |   |   |                                     | X                         |                 |                        |                   |                    |  |
| Animal Science ■   |   |   |                                     |                           |                 |                        |                   |                    |  |
| Plant Science ■  |   |   |                                     |                           |                 |                        |                   |                    |  |
| Supplementary Authorizations added to Multiple Subject or Standard Elementary Teaching Credentials (services in grades 9 and below)  |   |   |                                     |                           |                 |                        |                   |                    |  |
| Science  | X                                       | •                                       | <b>•</b>                            | X                         | 7-9             | X                      | X                 | X                  |  |
| General Science  |   |   |                                     |                           | 7-9             | X                      | X                 | X                  |  |
| Life Science   | X                                       |   |                                     |                           |                 |                        | X                 |                    |  |
| Physical Science   |   | •                                       | <b>*</b>                            | X                         |                 |                        |                   | X                  |  |
| (D : " C : C C I   |   |   |                                     |                           |                 |                        |                   |                    |  |

"Basic" Specific Supplementary Authorizations added to Single Subject or Standard Secondary Teaching Credential, or Special Secondary (in academic subjects only) Teaching Credentials (service in grades preschool, K – 12, and adults) in English, Math and Foreign Language (no longer available)

General Science • 7-12 X X X

- Supplementary authorizations in Animal Science and supplementary/subject matter authorizations in Plant Science authorize teaching the specific subject only
- The holder is authorized to teach this subject area; however, the subject area is not commonly taught in grades 9 and below
- "(Basic)" supplementary authorizations were issued under regulations in effect prior to 6-30-83; these are broad subject areas, but the term "(Basic)" should alert the employing agency that the holder may not have had extensive course work in the area and may not be the best choice to teach an advanced course in the subject