**UC Davis: Subject Matter Guidance – Science: Biological Science**

All credential candidates must demonstrate their proficiency in the subject matter of their intended credential. The CTC separates the required subject matter content into subtests, with each subtest covering specific domains (areas of knowledge). The following list summarizes all options available to meet the Subject Matter Requirement (SMR) for candidates interested in a Biological Science Credential:

* **Academic Major** in the subject area: the only degree majors currently approved to meet this requirement are a **Biological Science, Environmental Biology, Human Biology, or Marine Biology** degree.
* **Subject Matter Waiver**: earning an approved waiver in Biological Science based on classes taken as an undergraduate.
* **Coursework**: completion of coursework addressing ***all of the domains*** listed for that CSET subtest.
  1. Courses must be degree applicable and non-remedial
  2. A grade of a C- or better is required
  3. Each subtest is independent of the other subtests (i.e., you might have coursework to clear subtest I but not subtest II.)
* **California Subject Examinations for Teachers** (CSET): passing all required subtests Science
  1. Subtest I –- test code 215
  2. Subtest II –Life Science (Biology) – test code 217
* **Combination of coursework and CSET examination**(s): some combination of coursework and examinations to meet the content for all required subtests.

**Steps To Complete Your Review**

1. Do you have a degree major in specific Science area listed above?
   1. If yes, you have met SMR
   2. If no, move to next step
2. Did you complete or are you completing a Subject Matter Waiver program for Biological Science?
   1. If yes, you have met SMR
   2. If no, move to next step
3. Have you passed any of the CSET subtests?
   1. If yes, you have met SMR for that subtest
   2. If you have passed all required subtests, you have met SMR
   3. If you have not passed all required subtests, move to next step
4. Review the coursework options for any subtests where you have not met SMR by using the Biological Science by coursework worksheet. You must have taken a class in each and every domain listed for that subtest.
   1. If yes, you have a course for every domain for that subtest, you will request a **Subject Matter Evaluation** by submitting your information [here](https://ucdavis.co1.qualtrics.com/jfe/form/SV_56B6OuMJTOgehy6).
   2. If no, you have NOT taken a class in every domain listed for that subtest, you will need to pass the CSET exam for that subtest to meet SMR.

**BIOLOGICAL SCIENCE – By Coursework**

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| **SUBTEST I – Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts + Physical Sciences + Life Sciences + Earth and Space Sciences** | | | |
| **Domains** | Course # and Title | Course Description with link to course catalog | Grade & Term completed |
| 1. Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts |  |  |  |
| 1. Physical Sciences |  |  |  |
| 1. Life Sciences |  |  |  |
| 1. Earth and Space Sciences |  |  |  |

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| **SUBTEST II – Concentration: Life Science** | | | |
| **Domains** | Course # and Title | Course Description with link to course catalog | Grade & Term completed |
| 1. From Molecules to Organisms: Structures and Processes |  |  |  |
| 1. Ecosystems: Interactions, Energy, and Dynamics |  |  |  |
| 1. Heredity: Inheritance and Variation of Traits |  |  |  |
| 1. Biological Evolution: Unity and Diversity |  |  |  |

If you need clarification as to what content/elements are in each of these domains, you may review the list of elements on the CTC website [here](https://www.ctc.ca.gov/docs/default-source/educator-prep/files/domains-of-subject-matter-requirements.pdf?sfvrsn=dcd525b1_2). See page 2 for the index.

***Important note:***

***This evaluation is based on the CTC regulatory guidelines currently in effect. Should the CTC regulatory guidelines change prior to your being recommended for your Preliminary Credential, you would need to meet the new guidelines.***