



UW Bothell

Approved Chemistry Endorsement Courses

Washington state teachers must be certified to teach *and* must hold an endorsement in a teaching subject. To be eligible for an endorsement, applicants must complete with, a 2.0 grade or higher, a minimum of 45 credits of college-level coursework in their endorsement subject to demonstrate their knowledge and understanding of various topics in the discipline. Specific endorsement competency areas are outlined by the [State of Washington Professional Educator Standards Board](#).

^ Indicates courses that fulfill Chemistry (B.S.) major requirements

* Indicates courses that fulfill Chemistry (B.A.) major requirements

Chemistry General Introductory Sequence (3 courses)

B CHEM 143 + B CHEM 144 General Chemistry I with Laboratory^{^*}

B CHEM 153 + B CHEM 154 General Chemistry II with Laboratory^{^*}

B CHEM 163 + B CHEM 164 General Chemistry III with Laboratory^{^*}

Organic Chemistry with Laboratory (2 courses)

B CHEM 237 + B CHEM 241 Organic Chemistry I^{^*}

B CHEM 238 + B CHEM 242 Organic Chemistry II with Laboratory^{^*}

Qualitative Chemistry (1 course)

B CHEM 315 Quantitative Environmental Analysis^{^*}

Chemistry in Society (1 course)

B CHEM 294 Chemistry Seminar (1-2 cr)^{^*}

Biochemistry with Laboratory (1 course)

B CHEM 364 + B CHEM 366 Biochemistry I with Laboratory^{^*}

Physical Chemistry (1 course)

B CHEM 401 Physical Chemistry I (4 cr)^{^*}

Upper-Division Chemistry Courses (2 courses; 1 must be lab)

B CHEM 310 Molecular Modeling^{^*}
B CHEM 312 Inorganic Chemistry I (3 cr)^{^*}
B CHEM 313 Inorganic Chemistry II (3 cr)^{^*}
B CHEM 315 Quantitative Environmental Analysis^{^*}
B CHEM 350 Atmospheric Chemistry & Air Pollution^{^*}
B CHEM 364 + B CHEM 366 Biochemistry I with Laboratory^{^*}
B CHEM 365 Biochemistry II^{^*}
B CHEM 375 Molecular Biology^{^*}
B CHEM 401 Physical Chemistry I (4 cr)^{^*}
B CHEM 402 Physical Chemistry II (4 cr)^{^*}
B CHEM 403 Physical Chemistry III (4 cr)^{^*}
B CHEM 426 Instrumental Analysis^{^*}

Faculty-Mentored Research in Chemistry or Chemistry Education (1 course)

B CHEM 495 Investigative Chemistry I (3 cr)^{^*}
B CHEM 498 Independent Study in Chemistry
B CHEM 499 Undergraduate Research in Chemistry^{^*}

Physics Introductory Sequence (3 Courses)

B PHYS 114 + B PHYS 117 General Physics with Laboratory
B PHYS 115 + B PHYS 118 General Physics with Laboratory
B PHYS 116 + B PHYS 119 General Physics with Laboratory
B PHYS 121 Mechanics^{^*}
B PHYS 122 Electromagnetism and Oscillatory Motion^{^*}
B PHYS 123 Waves^{^*}

Calculus Sequence (3 courses)

STMATH 124 Calculus I^{^*}
STMATH 125 Calculus II^{^*}
STMATH 126 Calculus III^{^*}
STMATH 324 Multivariable Calculus^{^*} (encouraged, but not required)