UW Bothell
Approved Biology 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 Biology major requirements
^ Indicates courses that fulfill Conservation & Restoration Science major requirements
~ Indicates courses that fulfill Earth System Science major requirements
+ Indicates courses that fulfill Environmental Studies major requirements
← Indicates courses that fulfill Science, Technology & Society major requirements

**Biology Introductory Sequence (3 courses)**
B BIO 180 Introductory Biology I*~
B BIO 200 Introductory Biology II*
B BIO 220 Introductory Biology III*

**Biology with Laboratory (2 courses)**
B BIO 180 Introductory Biology I*
B BIO 200 Introductory Biology II*
B BIO 220 Introductory Biology III*
B BIO 351 Principles of Anatomy & Physiology I*
B BIO 352 Principles of Anatomy & Physiology II*
B BIO 370 Microbiology*
B BIO 471 Plant Ecology*^
BES 331 Estuarine Science and Management (not offered consistently)
BES 362 Introduction to Restoration Ecology
BES 486 Watershed Ecology and Management (not offered consistently)
BES 488 Wetland Ecology (not offered consistently)
BES 489 Pacific Northwest Ecosystems (not offered consistently)
BES 490 Pacific Northwest Plants in Restoration and Conservation (not offered consistently)
BIS 244 Wetlands Discovery (not offered consistently)

**Evolution/Genetics (1 course)**
B BIO 231 Genes, Genomes and Heredity* (offered jointly with BISSTS 231)
B BIO 233 Cancer: Biology, Risk, and Treatment*
B BIO 360 Introduction to Genetics*
B BIO 466 Evolution*

**Microbiology (1 course)**
B BIO 370 Microbiology*
B BIO 470 Microbiology II

**Molecular Biology (1 course)**
B BIO 375 Molecular Biology*

**Calculus or Statistics (1 course)**
STMATH 124 Calculus I*~
STMATH 341 Introduction to Statistical Interference~
BIS 215 Understanding Statistics
B MATH 144 Calculus for the Life and Social Sciences*
B MATH 215 Statistics for Health Sciences

**Chemistry Introductory Sequence (3 Courses)**
B CHEM 143+144 General Chemistry I + Lab*~
B CHEM 153+154 General Chemistry II + Lab*~
B CHEM 163+164 General Chemistry III + Lab*~

**Earth or Space Science (1 course)**
B BIO 130 Introduction to Marine Life
B BIO 330 Marine Biology^
B BIO 471 Plant Ecology*^
BEARTH 153 Introduction to Geology~
BEARTH 154 Introduction to Oceanography~
BEARTH 155 Introduction to Climate Science~++
BEARTH 310 Fundamentals of Weather and Climate~
BEARTH 317 Soils in the Environment^
BEARTH 318 Hydrogeology^
BEARTH 320 Impacts of Climate Change~++
BEARTH 321 Geomorphology
BES 331 Estuarine Science and Management (not offered consistently)
BES 362 Introduction to Restoration Ecology
BES 485 Conservation Biology
BES 486 Watershed Ecology and Management (not offered consistently)
BES 488 Wetland Ecology (not offered consistently)
BES 489 Pacific Northwest Ecosystems (not offered consistently)
BES 490 Pacific Northwest Plants in Restoration and Conservation (not offered consistently)
BIS 358 Issues in Environmental Science (not offered consistently)
BIS 360 Pollinator Diversity and Conservation

Physics Introductory Sequence (2 Courses)
B PHYS 114+117 General Physics + Lab
B PHYS 115+118 General Physics + Lab
B PHYS 116+119 General Physics + Lab

Social Issues in Science (1 course)
B BIO 231 Genes, Genomes, and Heredity
B BIO 232 Embryos, Genes, and Reproductive Technology
B BIO 233 Cancer: Biology, Risk, and Treatment
B BIO 305 The Science and Ethics of Stem Cells (5)
B BIO 310 Brain and Behavior
B BIO 335 Salmon and Society
BES 331 Estuarine Science and Management (not offered consistently)
BES 362 Introduction to Restoration Ecology
BES 485 Conservation Biology
BES 489 Pacific Northwest Ecosystems (not offered consistently)
BIS 240 Sustainable Practices
BIS 241 Nature and the Northwest
BIS 243 Environmental Issues
BIS 307 Environmental Justice
BIS 356 Ethics and Environment
BIS 358 Issues in Environmental Science (not offered consistently)
BIS 360 Pollinator Diversity and Conservation
BIS 380 Bioethics
BIS 391 Environmental History of Pacific Northwest Bioregion (not offered consistently)
BIS 395 Environmental Change in Washington State (not offered consistently)
BIS 405 Environmental Education
BIS 411 Biotechnology and Society (not offered consistently)
BIS 459 Conservation and Sustainable Development
BST 205 Women in STEM
BISSTS 307 Science, Technology, and Society
Conducted & Presented Research or Lab Internship (1 course)

B BIO 495 Investigative Biology*
B BIO 499 Undergraduate Research in Biology*
BES 491 Undergraduate Research in Environmental Science (not offered consistently)
BES 498 Independent Research in Environmental Science^~

Note: Depending on topic, Special Topics courses may meet endorsement requirements. Please submit Endorsement Course Syllabus Review Form to have a course considered for an endorsement area.