

## **Bachelor of Science Degree Core Requirements (100, 200-level) at various Washington 4-year institutions**

The following is a list of the core science and math requirements for students interested in majoring in a science discipline at most 4-year universities in the state of Washington. Specific requirements can vary from institution to institution, so the student is advised to check with the program advisor (not the general counseling office) at the institution of interest.

### BS Astronomy

- General Physics Series ( Phys 101,102 and 103)
  - Calculus I & II
  - Analytical Geometry I & II\*
  - Introduction to scientific programming ( C++ or Fortran)
- \*depends on individual universities

### BS Physics

- Physics I, II, III (calculus based)
  - General Chemistry I & II or Honors Chemistry
  - Calculus I, II & III
  - Ordinary Differential Equations
  - Multivariable Calculus \*
  - Introduction to linear Algebra\*
  - Elementary Numerical Analysis\*
- \*depends on individual universities

### BS Chemistry

- Calculus I, II, III
  - Chemistry I, II, III (General Chemistry)
  - Organic chemistry series I, II, III
  - Physics 101, 102, and 103 (algebra based)
  - Biology I\*, II\*, III\*
- \*not required at all institutions

### BS Oceanography

- Calculus I, II, III (recommended) or Calculus series for Life Sciences
  - Physics series (calculus based, recommended) or Physics series (algebra based)
  - Biology I & II (required), III recommended
  - Geology I (required), II (recommended)
  - Chemistry I, II (required), III (recommended)
- \*UW School of Oceanography*

### BS Geology

- Calculus I, II (required), III (optional or statistics)
  - Physics I & II (required), III optional
  - Chemistry I & II (required), III optional
  - Geology 101 & 201
- \*UW Earth & Space Sciences Dept.*

### BS Environmental Science

A. BS Environmental Sci. & Resource Management, UW College of Forest Resources

- Calculus I & II, Statistics
- Biology I & II
- Chemistry I & II

B. BS Environmental Science, WWU Huxley College of the Environment

- Chemistry I, II, III
- Biology I, II, III
- Calculus I
- Geology I

\*environmental degrees & core requirements vary considerably from institution to institution

### BS Biology

- Biology I, II, III
- Chemistry I, II, III
- Calculus I or Statistics

\**EWU Biology Dept.*

### BS Atmospheric Science

- Calculus I, II, III
- Physics I, II, III (calculus based)

\**UW Dept. of Atmospheric Sciences*

### BS Microbiology

- Biology I, II, & (III) \*
- Chemistry I, II, & (III)\*, Organic Chemistry I
- General Physics I, II, & (III)\* algebra-based
- Math for Life Sciences I or Calculus I

\*WSU Microbiology, semester system so check on specific courses

### BS Biotechnology

- Biology I, II, III
- Chemistry (general) I, II, III, Organic I, II, III
- Calculus I, II
- Physics I, II, III (algebra-based)

\**EWU Biology Dept.*