BACHELOR OF SCIENCE (BSc) GRADUATION CHECKLIST

• Environmental Science Major
  • Applied Biology Concentration

Name: ________________________        Student #: ______________________

Required Units

To graduate from the Environmental Science Program (Major)

☐ approval in the Applied Biology Concentration (see back)
☐ at least 120 units
☐ at least 44 upper division units (within the 120 units)

Residency Requirements and Transfer Units: The University’s residency requirement stipulates that, in most cases, total transfer and course challenge units may not exceed 60 units, and may not include more than 15 units as upper division work.

WQB Requirements*

• 6 units of Writing ("W") including at least 3 units taken at SFU
  3 units of W
  □________
  3 units of 300- or 400-level W within major □_______

• 6 units of Quantitative “Q” □_______ □_______

• 18 units of Designated Breadth “B”
  6 units of B-Soc (Social Science) □_______ □_______
  6 units of B-Hum (Humanities) □_______ □_______
  6 units of B-Sci (Science) □_______ □_______

• 6 units of Undesignated Breadth □_______ □_______

Notes: A minimum grade of C- is required to earn WQB unit. A single course can count for W, Q, and B unit (however, only one B where two are possible). See http://www.sfu.ca/ugcr.html for more details.
*Any required courses from this major may be used to fulfill these requirements.

GPA Requirements

To graduate from the Environmental Science Program (Major)

☐ CGPA must be 2.00 or higher and UDCGPA must be 2.00 or higher

Advising

Contact your academic advisor, Sandy Goettler at envad@sfu.ca or 778-782-9396 or in TASC2 8800 during drop-in advising hours as posted on www.fenv.sfu.ca/advising.

Each student is responsible for ensuring that his or her academic choices meet the requirements for graduation. All requirements are outlined in the SFU Calendar. Advisors are available to provide guidance. However, the student has ultimate responsibility for compliance with and completion of the program and degree requirements and for observing regulations and deadlines.
Course requirements for the Environmental Science Major

Appllied Biology Concentration

**LOWER DIVISION REQUIREMENTS**

Students complete all of

- BISC 101-4 - General Biology [B-Sci]
- BISC 102-4 - General Biology [B-Sci]
- BISC 202-3 - Genetics
- BISC 204-3 - Introduction to Ecology
- CHEM 121-4 - General Chemistry and Laboratory I [Q, B-Sci]
- CHEM 122-2 - General Chemistry II [Q]
- CHEM 126-2 - General Chemistry Laboratory II [Q]
- CHEM 215-4 - Introduction to Analytical Chemistry [Q]
- EVSC 100-3 - Introduction to Environmental Science [B-Sci]
- EVSC 205-3 - Methods in Environmental Science
- GEOG 111-3 - Earth Systems [B-Sci]
- REM 100-3 - Global Change [B-Soc]

And one of

- MATH 150-4 - Calculus I with Review [Q]
- MATH 151-3 - Calculus I [Q]
- MATH 154-3 - Calculus I for the Biological Sciences [Q]

And one of

- MATH 152-3 - Calculus II [Q]
- MATH 155-3 - Calculus II for the Biological Sciences [Q]

And one of

- PHYS 101-3 - Physics for the Life Sciences I [Q, B-Sci]
- PHYS 120-3 - Mechanics and Modern Physics [Q, B-Sci]

And one of

- PHYS 102-3 - Physics for the Life Sciences II [Q, B-Sci]
- PHYS 121-3 - Optics, Electricity and Magnetism [Q, B-Sci]

And one of

- STAT 201-3 - Statistics for the Life Sciences [Q]
- STAT 270-3 - Introduction to Probability and Statistics [Q]

**UPPER DIVISION REQUIREMENTS**

Students complete all of

- BISC 316-4 - Vertebrate Biology
- BISC 337-4 - Plant Biology
- EVSC 399-1 - Environmental Science Seminar I
- EVSC 499-1 - Environmental Science Seminar II
- GEOG 316-4 - Global Biogeochemical and Water Cycles [Q]
- REM 311-3 - Applied Ecology and Sustainable Environments [Q]
- REM 445-3 - Environmental Risk Assessment

And one of

- STAT 302-3 - Analysis of Experimental and Observational Data [Q]
- STAT 305-3 - Introduction to Biostatistical Methods for Health Sciences [Q]

And two of

- ENV 319-3 - Environmental Law*
- ENV 320W-3 - Ethics and the Environment [W]*
- ENV 321-4 (or) REM 321-4 - Ecological Economics*

And one of **

- CMNS 347-4 - Communication in Conflict and Intervention
- ENV 319-3 - Environmental Law*
- ENV 320W-3 - Ethics and the Environment [W]*
- ENV 321-4 (or) REM 321-4 - Ecological Economics*
- FNST 301-3 - Issues in Applied First Nations Studies Research
- FNST 332-3 - Ethnobotany of British Columbia First Nations [B-Sci]
- FNST 443W-4 - Aboriginal Peoples, History and the Law [W]
- GEOG 322-4 - World Resources
- GEOG 325-4 - Geographies of Consumption
- GEOG 363-4 - Urban Planning and Policy
- GEOG 381-4 - Political Geography
- GEOG 389W-4 - Nature and Society [W]
- REM 356-3 - Institutional Arrangements for Sustainable Environmental Management
- SA 326-4 - Ecology and Social Thought [S]
- SA 371-4 - The Environment and Society [SA]

And three of [or any upper division course selected by the student with permission from the Director]

- BISC 300-3 - Evolution
- BISC 306-4 - Invertebrate Biology
- BISC 309-3 - Conservation Biology
- BISC 326-3 - Biology of Algae and Fungi
- BISC 366-3 - Plant Physiology
- BISC 403-3 - Current Topics in Cell Biology
- BISC 404W-3 - Plant Ecology
- BISC 407-3 - Population Dynamics
- BISC 414-3 - Limnology
- PHYS 346-3 - Energy and the Environment [Q]
- REM 412-3 - Environmental Modeling [Q]
- REM 471-3 - Forest Ecosystem Management
- STAT 403-3 - Intermediate Sampling and Experimental Design [Q]

* Note: These courses are listed under two requirements: ENV 319-3, ENV 320W-3, ENV 321-4, REM 321-4. However, each course can only fulfill one requirement.

** Note: Occasionally 300 or 400 division Special Topics courses may be offered that can fulfill this requirement; check the EVSC website http://www.sfu.ca/evsc for information.

[Lower Division Courses Common to All Concentrations]

- BISC 101-4
- BISC 102-4
- CHEM 121-4
- CHEM 122-2
- EVSC 100-3
- EVSC 205-3
- GEOG 111-3
- MATH 150-4 or 151-3 or 154-3
- MATH 152-3 or 155-3
- PHYS 101-3 or 120-3
- PHYS 102-3 or 121-3