



ENGINEERS &
GEOSCIENTISTS
BRITISH COLUMBIA

Vancouver Island University

Environmental Geoscience Course Equivalent Listing

(Updated June 2021)

NOTE: This course listing is a reflection of APEGBC's adoption of the Geoscientists Canada "Geoscience Knowledge Requirements". Since January 2011, geoscience applicants have the option of attempting to meet the academic requirements either by applying under this 2011 syllabus or the previous 2006 syllabus. The courses in this document have been identified in consultation with Vancouver Island University. Please be aware that course codes can be subject to change at any time.

Name: _____

System ID#: _____

**ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF BRITISH COLUMBIA
ENVIRONMENTAL GEOSCIENCE SYLLABUS – VIU COURSE EQUIVALENT LIST**

This Geoscience Syllabus Should be Used as a Guide and May Be Subject to Change

****Please note a course can only be used ONCE on the checklist****

| | Number | Description | VIU Course | For Applicant Use |
|---------|---|------------------------------|--|-------------------|
| | Group: 1A – Compulsory Foundation Science – 11-GEOCOM- Fundamental Science (3 Required) | | | |
| | FS-A1 | Calculus (1 semester) | MATH 100, 121 | |
| | FS-A2 | Physics (1 semester) | PHYS 111, 121 | |
| | FS-A3 | Chemistry (1 semester) | CHEM 140 | |
| | Group: 1B – Additional Foundation Science – 11-GEOCOM- Electives (6 Required – NO MORE THAN TWO COURSES IN ANY ONE SUBJECT) | | | |
| | COM-B1 | Mathematics | MATH 101, 122 or any 200 level or higher | |
| | COM-B2 | Chemistry | CHEM 141, 142 or any 200 level or higher | |
| | COM-B3 | Physics | PHYS 112, 122 or any 200 level or higher | |
| | COM-B4 | Biology | BIOL 121, 123 or any 200 level or higher | |
| | COM-B5 | Computer Programming | CSCI 112, 160 | |
| | COM-B6 | Statistics | MATH 181 or 211 or 254 or GEOG 221 | |
| | Group: 2A – Compulsory Geoscience – 11-GEOCOM- Compulsory (4 Required) | | | |
| | COM-A1 | Mineralogy & Petrology | GEOL 200 | |
| | COM-A2 | Sedimentation & Stratigraphy | GEOL 201 | |
| | COM-A3 | Structural Geology | GEOL 202 | |
| | COM-A4 | Field Techniques | GEOL 206 | |
| | Group: 2B – Foundation Environmental Geoscience – 11-EG – Compulsory (5 Required – Must have a minimum of one and at most , two from each sub-group, but no more than one in each subject) | | | |
| Group A | FEG-A1 | Geophysics | GEOL 307 | |
| | FEG-A2 | Geochemistry | GEOL 308 | |
| Group B | FEG-A3 *choose 1 | Hydrology/ Hydrogeology | GEOG 374, GEOL 304 | |
| | FEG-A4 | Engineering Geology | GEOL 303 | |

**ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF BRITISH COLUMBIA
ENVIRONMENTAL GEOSCIENCE SYLLABUS – VIU COURSE EQUIVALENT LIST**

This Geoscience Syllabus Should be Used as a Guide and May Be Subject to Change

****Please note a course can only be used ONCE on the checklist****

| | Number | Description | VIU Course | For Applicant Use |
|--|---------------------|---------------------------------|--------------------------|-------------------|
| Group C | FEG-A5 *choose 1 | Geomorphology/ Soil Science | GEOG 376, FRST 151 & 152 | |
| | FEG-A6 | Glacial Geology | GEOL 305 | |
| | FEG-A7 | Remote Sensing | GEOG 326 | |
| Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required) | | | | |
| Communication | EG-C1 | Thesis | GEOL 491 | |
| | EG-C2 | Technical Writing | ENGL 204 | |
| Earth Systems | EG-C3 | Climatology | GEOG 372 | |
| | EG-C4 | Meteorology | NO EQUIVALENT COURSE | |
| | EG-C5 | Oceanography | BIOL 362 | |
| | EG-C6 | Paleoenvironmental Studies | NO EQUIVALENT COURSE | |
| | EG-C7 | Paleoclimatology | GEOL 412 | |
| | EG-C8 | Paleoecology | GEOG 373 | |
| | EG-C9 | Ecology | BIOL 202 | |
| Environmental Assessment | EG-C10 | Environmental Assessment. | RMOT 306 | |
| Field Techniques | EG-C11 | Field Techniques | GEOL 390 | |
| Geochemistry | EG-C12 | Environmental Geochemistry | CHEM 311 | |
| | EG-C13 | Isotope Geochemistry | NO EQUIVALENT COURSE | |
| | EG-C14 | Aqueous Geochemistry | CHEM 301 | |
| | EG-C15 | Biogeochemistry | NO EQUIVALENT COURSE | |
| | EG-C16 | Atmospheric Geochemistry | CHEM 302 | |
| | EG-C17 | Low Temperature Geochemistry | NO EQUIVALENT COURSE | |

**ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF BRITISH COLUMBIA
ENVIRONMENTAL GEOSCIENCE SYLLABUS – VIU COURSE EQUIVALENT LIST**

This Geoscience Syllabus Should be Used as a Guide and May Be Subject to Change

****Please note a course can only be used ONCE on the checklist****

| Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required) continued | | | | |
|--|--------|--------------------------|----------------------|--|
| Geomorphology/ Surficial | EG-C18 | Geomorphology | GEOL 301, 376 | |
| | EG-C19 | Natural Hazards | GEOL 312, 470 | |
| | EG-C20 | Quaternary Geology | GEOL 305 | |
| | EG-C21 | Pedology | FRST 151, 152 | |
| | EG-C22 | Glaciology | NO EQUIVALENT COURSE | |
| Geophysics | EG-C23 | Environmental Geophysics | NO EQUIVALENT COURSE | |
| | EG-C24 | Exploration Geophysics | NO EQUIVALENT COURSE | |
| | EG-C25 | Applied Geophysics | NO EQUIVALENT COURSE | |
| Geotechnical | EG-C26 | Engineering Geology | GEOG 303 | |
| | EG-C27 | Soil Mechanics | NO EQUIVALENT COURSE | |
| | EG-C28 | Rock Mechanics | NO EQUIVALENT COURSE | |
| | EG-C29 | Resource Geotechnics | NO EQUIVALENT COURSE | |
| Hydrology/ Hydrogeology | EG-C30 | Contaminant Transport | NO EQUIVALENT COURSE | |
| | EG-C31 | Hydrogeology | GEOL 304 | |
| | EG-C32 | Hydrology | GEOG 374 | |
| | EG-C33 | Fluid Mechanics | NO EQUIVALENT COURSE | |
| Mineralogy/ Petrology | EG-C34 | Crystallography | GEOL 300 | |
| | EG-C35 | X-Ray Crystallography | NO EQUIVALENT COURSE | |
| | EG-C36 | Analytical Methods | NO EQUIVALENT COURSE | |

**ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF BRITISH COLUMBIA
ENVIRONMENTAL GEOSCIENCE SYLLABUS – VIU COURSE EQUIVALENT LIST**

This Geoscience Syllabus Should be Used as a Guide and May Be Subject to Change

****Please note a course can only be used ONCE on the checklist****

| | Number | Description | VIU Course | For Applicant Use |
|--|--------|-------------------------------------|----------------------|-------------------|
| Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required) continued | | | | |
| Paleontology | EG-C37 | Micropaleontology | NO EQUIVALENT COURSE | |
| | EG-C38 | Paleobiology | NO EQUIVALENT COURSE | |
| | EG-C39 | Palynology | NO EQUIVALENT COURSE | |
| Quantitative Analysis | EG-C40 | Geostatistics | NO EQUIVALENT COURSE | |
| | EG-C41 | Computer Applications in Geoscience | NO EQUIVALENT COURSE | |
| | EG-C42 | Geographic Information Systems | GEOG 328, 428 | |
| Regional Geology | EG-C43 | Geology of Canada | NO EQUIVALENT COURSE | |
| | EG-C44 | Geology of North America | NO EQUIVALENT COURSE | |
| Remote Sensing | EG-C45 | Remote Sensing | GEOG 326 | |
| | EG-C46 | Air Photo Interpretation | NO EQUIVALENT COURSE | |
| Resource Geology | EG-C47 | Economic Geology | GEOL 302 | |
| | EG-C48 | Mineral Deposits | NO EQUIVALENT COURSE | |
| | EG-C49 | Ore Petrology | NO EQUIVALENT COURSE | |
| | EG-C50 | Coal Geology | NO EQUIVALENT COURSE | |
| | EG-C51 | Petroleum Geology | NO EQUIVALENT COURSE | |
| | EG-C52 | Industrial Minerals | NO EQUIVALENT COURSE | |
| Sedimentology | EG-C53 | Chemical Sedimentology | NO EQUIVALENT COURSE | |
| | EG-C54 | Clastic Sedimentology | NO EQUIVALENT COURSE | |
| | EG-C55 | Carbonate Sedimentology | NO EQUIVALENT COURSE | |
| | EG-C56 | Glacial Geology | NO EQUIVALENT COURSE | |
| | EG-C57 | Limnogeology | NO EQUIVALENT COURSE | |

**ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS OF BRITISH COLUMBIA
ENVIRONMENTAL GEOSCIENCE SYLLABUS – VIU COURSE EQUIVALENT LIST**

This Geoscience Syllabus Should be Used as a Guide and May Be Subject to Change

****Please note a course can only be used ONCE on the checklist****

| | Number | Description | VIU Course | For Applicant Use |
|--|--------|----------------------------|----------------------|-------------------|
| Group: 2C – Other Environmental Geoscience – 11-EG – Electives (9 Required) continued | | | | |
| Stratigraphy | EG-C58 | Historical Geology | NO EQUIVALENT COURSE | |
| | EG-C59 | Sequence Stratigraphy | NO EQUIVALENT COURSE | |
| | EG-C60 | Stratigraphic Paleontology | NO EQUIVALENT COURSE | |
| | EG-C61 | Geochronology | NO EQUIVALENT COURSE | |
| Structure | EG-C62 | Global Tectonics | NO EQUIVALENT COURSE | |
| | EG-C63 | Tectonics | NO EQUIVALENT COURSE | |
| | EG-C64 | Structural Geology | NO EQUIVALENT COURSE | |