

# GEOGRAPHY (GEOG)

This is a list of the Geography (GEOG) courses available at KPU.

For information about transfer of credit amongst institutions in B.C. and to see how individual courses transfer, go to the BC Transfer Guide [bctransferguide.ca](http://bctransferguide.ca)

## **GEOG 1101** **3 Credits** **Human Geography**

Students will examine the nature and diversity of human geography, and learn to understand and describe the spatial characteristics of human population change, distribution and settlement, social-cultural interactions, and economic activities. Students will also learn how the natural environment facilitates or constrains these activities, and how human activities in turn affect the natural environment. They will learn and apply basic cartographic, qualitative and quantitative techniques commonly used in human geography.

## **GEOG 1110** **3 Credits** **Atmospheric Science**

Students will apply basic scientific principles to study the atmosphere, examine weather processes, and describe patterns of climate worldwide. They will study the flows and transfer of energy and water to and from the Earth's surface. They will examine the integration of a variety of atmospheric phenomena ranging from microscale weather events, such as local convection and clouds with vertical development, to macroscale frontal systems, wind belts, and general air mass circulation. Students will also discuss evidence and theories concerning long term climate change. Students will learn and apply a variety of quantitative and qualitative techniques commonly used in Geography.

*Attributes: QUAN*

## **GEOG 1120** **3 Credits** **Earth Science**

Students will examine the origin, composition, and evolution of the Earth through a study of its rocks and minerals, the geologic time scale, the role of tectonic processes in creating and modifying continents, volcanism, and seismic activity. Students will also examine how the Earth's surface has been modified by weathering and erosion through fluvial (stream), glacial, aeolian, coastal, and slope processes. They will apply this knowledge to understanding local landscapes and the human impact on them. Students will be introduced to a variety of cartographic, quantitative, and qualitative techniques used by geographers.

*Attributes: QUAN*

## **GEOG 1160** **3 Credits** **Geography of British Columbia**

Students will examine the evolution of regional patterns of socio-economic growth and development in British Columbia from a geographical perspective. They will examine how the physical environment facilitates or constrains the economic and social development of British Columbia. Students will also investigate contemporary issues such as natural resource conservation, socio-economic development, urbanization, and life in the rural areas.

*Attributes: PATH-3*

## **GEOG 2140** **3 Credits** **Regional Geography of Canada**

Students will examine how geographic, historical, economic, and cultural factors intersect in the various regions of Canada. They will discuss selected issues like regional disparity, immigration, climate change, Aboriginal sovereignty and Canada's integration into the global economy.

## **GEOG 2170** **3 Credits** **Regional Geography of Europe**

Students will examine the physical and human geography of the countries of Eastern and Western Europe. They will examine the roles played by the physical, cultural and economic resources in the development of the region.

*Prerequisites: GEOG 1101 (HIST 1101 strongly recommended)*

## **GEOG 2185 (formerly GEOG 1185)** **3 Credits** **Regional Geography of East Asia**

Students will examine the physical and human environments of East Asia, including China, Hong Kong, Taiwan, Japan, and North and South Korea, from a geographical perspective. They will critically analyze the roles played by physical, cultural, and economic resources in the development of this region. Students will examine the current interactions between the countries of this region within national and international contexts and consider possible futures for East Asia.

## **GEOG 2190 (formerly GEOG 1190)** **3 Credits** **Regional Geography of South Asia**

Students will explore the physical and human geography of South Asia. They will examine South Asia's landforms, climate, settlement, population, historical geography, economic activities, and cultural landscapes. Students will gain an understanding of the major geographical patterns, processes, issues, and problems of South Asia.

## **GEOG 2250** **3 Credits** **The City**

Students will study cities as distinctive spaces of human settlement. They will investigate the early origins of cities and the process of urbanization as it has unfolded over the course of human history. Students will explore spatial and temporal variations in urban function, urban form, and urban social organization. They will examine how these characteristics of cities are influenced by, and in turn shape, natural environmental conditions, technological innovations, economic development, demographic trends, and political organization. Students will apply the concepts of urban geography to understand cities around the world and, in particular, the landscape of metropolitan Vancouver.

*Prerequisites: 9 credits from courses at the 1100 level or higher*

## **GEOG 2310** **3 Credits** **Climatology**

Students will apply scientific principles and methods to climatological processes. They will analyze climatological and meteorological concepts such as the radiation and energy balance, lapse rates and stability, water budgets and general circulation modelling. Students will examine the use of the concepts in weather and climate forecasting, as well as their use in understanding climatic change.

*Prerequisites: 9 credits from courses at the 1100 level or higher, including GEOG 1110*

*Attributes: QUAN*

**GEOG 2320** **3 Credits**  
**Geomorphology**

Geomorphology is the study of landforms and the processes that shape them. The aim is to understand why landscapes look the way they do and what processes are responsible for their formation. Landscapes can be studied at different scales, so we will look at processes that impact large areas such as mountain building due to plate tectonics, and much more local events such as mass wasting events on hill slopes. Landforms evolve in response to a combination of natural and anthropogenic processes and every landscape is a representation of its history.

*Prerequisites: 9 credits from courses at the 1100 level or higher, including GEOG 1120*  
*Attributes: QUAN*

**GEOG 2380** **3 Credits**  
**Qualitative Methods in Geography**

Students will learn and apply qualitative methods of information gathering, interpretation, and presentation. They will consider past and present usage of these methods in geography, and the ethical and practical considerations which guide qualitative approaches. They will practice a range of qualitative methods of information gathering and analysis, such as archival research, discourse analysis, questionnaires, and interviews. Students will also practice written, graphical, and oral methods of qualitative information communication and dissemination. They will consider the importance of these qualitative skills to their academic, professional, and social lives.

*Prerequisites: 9 credits from courses at the 1100 level or higher*

**GEOG 2390** **3 Credits**  
**Quantitative Methods in Geography**

Students will explore techniques for describing, visualizing, and analyzing quantitative data in geography. They will examine the application of descriptive and inferential statistical methods with particular attention to issues concerning spatial data. Students will develop basic proficiency using industry-standard computer software.

*Prerequisites: 18 credits at the 1100 level or higher*  
*Attributes: QUAN*

**GEOG 2400** **3 Credits**  
**Introduction to GIS**

Students will study the basic theory of Geographic Information Systems (GIS) and apply GIS concepts to practical problems in geography at an introductory level. They will discuss a range of GIS technical issues, apply GIS operations using a popular desktop GIS software package, and through these applications improve their skills in designing and creating appropriate graphics.

*Prerequisites: 3 credits from GEOG courses at the 1100 level or higher*  
*Attributes: QUAN*

**GEOG 3120** **3 Credits**  
**Economic Geography**

Students will critically examine the location and distribution of economic activities with particular emphasis at the urban scale. They will examine the unequal distribution of economic activity around the world and discuss processes of globalization and development. They will analyze theories explaining the location of natural resource industries, manufacturing and services, and changes in local and regional economies. Students will critically evaluate relationships among urban land use, transportation infrastructure, and environmental sustainability.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including ECON 1101 or GEOG 1101.*

**GEOG 3130** **3 Credits**  
**Society and Urban Space**

Students will examine society from a geographic, or 'spatial' perspective, with particular attention to the urban setting. They will explore how various facets of social identity such as race, ethnicity, disability, class, gender/sexuality, family status, age, and criminality, are expressed in the landscape. They will also examine how identities are shaped, and social relations influenced, by the organization of space. Students will explore and evaluate positions on a variety of related urban issues, such as housing affordability, gentrification, accessibility, crime prevention, and residential segregation. They will conduct research that addresses contemporary social geographic issues in metropolitan Vancouver.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including GEOG 1101 or SOCI 1125.*

**GEOG 3220** **3 Credits**  
**Urban Politics and Planning**

Students will examine the political organization of city space. They will study the development of municipal political jurisdiction, municipal electoral politics, and local/community-based political movements. Students will also explore the development of modern city planning, with particular attention to the development, principles, and practices of land use zoning, transportation planning, and social planning. They will focus on urban politics and planning in Canada, and compare Canadian practices with those in other countries. They will conduct research that addresses a contemporary political geographic issue in metropolitan Vancouver.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including GEOG 1101, POLI 1123 or POLI 1125.*

**GEOG 3260** **3 Credits**  
**Geographic Thought**

Students will critically examine the perspectives, concepts, theories, and methodologies characteristic of geographic thought and of the discipline of Geography. They will survey the historical development of geographic thought and will assess contemporary approaches to geographic knowledge within physical and human geography. Students will review discussion about Geography's ability to provide holistic perspectives regarding the challenges facing humanity.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including GEOG 1101, GEOG 1110 and GEOG 1120.*

**GEOG 3310** **3 Credits**  
**Natural Hazards**

Students will investigate physical processes and initiation of natural hazards such as geologic hazards (earthquakes, volcanoes), atmospheric hazards (hurricanes, tornadoes), hydrologic hazards (flooding, water pollution), biologic hazards (pests, disease), as well as more general topics such as global climate change and its perceived effects on hazard frequency. Students will analyze why certain populations are at risk and how humans try to prepare for and mitigate hazardous conditions. They will examine new technologies and investigate historic and recent events in case studies, lab and field trip settings.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including one of the following: GEOG 1110 or GEOG 1120.*

**GEOG 3320** **3 Credits**  
**Environment and Resources**

Students will examine the principles and practices of environmental resource management. They will explore how resources are conceptualized and assess the effectiveness of resource management systems in addressing environmental issues, preserving ecological capital, and achieving socio-economic goals. They will critically analyse the character, roles and interactions among various actors involved in environmental resource management. They will, in examining these issues, pay particular attention to city-environment relationships. Students will conduct research that addresses a current environmental resource management issue.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including GEOG 1101, GEOG 1110 or GEOG 1120.*

**GEOG 3330 (formerly GEOG 2330)** **3 Credits**  
**Hydrology**

Students will critically examine theoretical and applied aspects of the hydrologic cycle near the Earth's surface. They will critically analyze precipitation, evaporation, groundwater flow, surface runoff and snowmelt processes. Students will examine and evaluate applied techniques including the collection, compilation and processing of field data.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including GEOG 1110 and 1120.*

*Attributes: QUAN*

**GEOG 3340 (formerly GEOG 2340)** **3 Credits**  
**Biogeography**

Students will examine the past and present geographic distribution of wild plants and animals. They will study terms and theories applicable to biogeography, and the systems used to classify wild animals and plants. Students will investigate the various factors that influence the spatial and temporal patterns in the distribution of the earth's biomes, as well as the evolution and extinction of species. They will examine the impacts of humans on the biosphere, and human awareness of, and responses to, these impacts. Students will identify plants and classify specific biogeoclimatic zones on a field trip.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including two of the following: BIOL 1110, GEOG 1110, or GEOG 1120*

**GEOG 3390** **3 Credits**  
**Methods in Environmental Geography**

Students will learn current methods in Environmental Geography including field data collection, lab analysis, and computer modelling techniques. Students will examine research methodologies including field site choice, sampling strategies, primary and secondary data collection, and analysis of collected data. This course will include field trips, collection and analysis of data, and report writing.

*Prerequisites: 18 credits from courses at the 1100 level or higher, including (a) GEOG 2310 or GEOG 2320, and (b) GEOG 2390*  
*Attributes: QUAN*

**GEOG 4100** **3 Credits**  
**Research Design in Geography**

Students will develop a primary research proposal on a selected topic of relevance to human geography or physical geography. They will formulate a research question or questions rooted in a literature review of the issue in question. They will identify a methodology for the proposed research and outline an a data instrument and sampling method, as appropriate. They will address the practical demands of geographic research, including scheduling, budgeting, and institutional oversight. and consider ways to disseminate results.

*Prerequisites: 45 credits from courses at the 1100 level or higher, including one of the following: GEOG 2380, GEOG 2390 or GEOG 2400.*

**GEOG 4320** **3 Credits**  
**Advanced Studies in Geomorphology**

Students will further their geomorphological knowledge by critically examining landforms and the processes acting upon them through geomorphic applications, case studies, and field trips. They will use geomorphic techniques to explore landforms and the complex combination of natural and anthropogenic processes that influence landform evolution. Students will investigate glacial, fluvial, and coastal landforms and landscapes in the Lower Mainland through field trips and research projects.

*Prerequisites: 45 credits from courses at the 1100-level or higher, including GEOG 2320*

*Attributes: QUAN*

**GEOG 4350** **3 Credits**  
**Climate Change**

Students will investigate climate change through geological time with a strong focus on the Holocene. They will be introduced to different aspects of climate change, including the measurement of present and past climates, the causes of climate change, the consequences of changing climates, and the methods used to predict future climates. Students will apply this knowledge to understand how climate has changed throughout the Holocene and how these changes have influenced humans (e.g., the demise of the Mayan culture, settling and abandonment of Greenland), in order to better anticipate the processes and impacts of future climate change and to evaluate efforts to mitigate these impacts.

*Prerequisites: 45 credits from courses at the 1100 level or higher, including GEOG 2310.*

**GEOG 4380** **3 Credits**

**Applications in GIS**

Students will further their knowledge of Geographic Information Systems (GIS) by applying GIS technology to spatial analysis problems. They will use GIS to analyze case studies in fields such as environmental science, resource management, urban planning, social science, criminology and medicine. Students will explore the techniques, methods and processes involved in the development of a GIS, technical issues and project management.

*Prerequisites: All of (a) 18 credits from courses at the 1100 level or higher, and (b) GEOG 2400.*

**GEOG 4501** **3 Credits**

**Current Geographic Issues**

Students will engage in an intensive study of a selected topic in geography, as determined by the instructor. They will review relevant literature, develop a research proposal, write a comprehensive report, and present the results of their research. Note: the topic of study will be established in advance by the department. Please check with the department for proposed offerings. Students may take this course multiple times for further credit on different topics.

*Prerequisites: 45 credits from courses at the 1100 level or higher*

**GEOG 4599** **3 Credits**

**Directed Studies**

Students will carry out a detailed investigation of a geographic topic consisting of readings and research, under the supervision of a faculty member with expertise in the area. They will be required to identify relevant sources of information and to develop a comprehensive understanding of their topic, in addition to submitting a final assignment.

*Prerequisites: 30 credits from courses in GEOG*