

# GEOGRAPHY (GEOG)

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

## **GEOG 1101 CR-3**

### **Human Geography**

Students will examine the nature and diversity of human geography, which attempts to describe and understand the spatial characteristics of human population change, distribution and settlement, social-cultural interaction, 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.

*Transferable (refer to transfer guide)*

## **GEOG 1110 CR-3**

### **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.

*Transferable (refer to transfer guide)*

## **GEOG 1120 CR-3**

### **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.

*Transferable (refer to transfer guide)*

## **GEOG 1130 CR-3**

### **Human Impacts on Canadian Environments**

Students will examine the relationships between humans and physical environments, with particular emphasis on Canada, a country whose natural resource base has long been the main driver of its development. They will examine a range of views on sustainability, apply these to the selected environmental issues in Canada, and then compare and contrast the effectiveness of public policy towards improving and preserving Canadian environments.

*Transferable (refer to transfer guide)*

## **GEOG 1160 CR-3**

### **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.

*Transferable (refer to transfer guide)*

## **GEOG 2120 CR-3**

### **Economic Geography**

Students will analyze the location and distribution of economic activities, and the socioeconomic causes and consequences of these patterns over space. They will examine issues and theories relevant to natural resources, manufacturing, transportation and communications, and services, at a range of scales. Students will explore issues of land use and environmental sustainability in an economic and spatial context. They will study the structure of the world economy, socioeconomic development, methods of flexible production, gendered labour and processes of globalization.

*Prerequisites: GEOG 1101 or ECON 1101*

*Transferable (refer to transfer guide)*

## **GEOG 2130 CR-3**

### **Social and Cultural Geography**

Students will explore the interactions among culture, society, and geographic space. They will examine the geographic origins, spatial variation, and spatial diffusion of various social/cultural phenomena, as well as their reflection in the material landscape, approaches characteristic of 'traditional' social/cultural geography. Students will also employ the concepts and theoretical perspectives characteristic of the 'new' cultural geography to critically examine the spatial dimensions of social/cultural issues at various scales of analysis

*Prerequisites: GEOG 1101*

*Transferable (refer to transfer guide)*

## **GEOG 2140 CR-3**

### **Regional Geography of Canada**

Students will examine the evolution of physical and human environments, and regional patterns of socioeconomic development in Canada, from a geographical perspective. They will analyze and critically comment on interactions between regions within Canada, on patterns of trade, immigration, and other activities within national, continental, and international contexts, and on possible futures for Canada and its regions.

*Transferable (refer to transfer guide)*

## **GEOG 2170 CR-3**

### **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)*

*Transferable (refer to transfer guide)*

**GEOG 2185 CR-3 (formerly GEOG 1185)****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 analyze and critically comment on the roles played by physical, cultural, and economic resources in the development of this region. They will examine the present interactions between the countries of this region within national and international contexts and consider possible futures for this region.

*Transferable (refer to transfer guide)*

**GEOG 2190 CR-3 (formerly GEOG 1190)****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.

*Transferable (refer to transfer guide)*

**GEOG 2250 CR-3****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 of 1100 level or higher*

*Transferable (refer to transfer guide)*

**GEOG 2310 CR-3****Climatology**

This course applies scientific principles and methods to climatological processes. The study investigates concepts such as the radiation and energy balance, lapse rates and stability, water budgets and general circulation modeling as well as forecasting and climatic change.

*Prerequisites: GEOG 1110 (C) and GEOG 1120 (C)*

*Transferable (refer to transfer guide)*

**GEOG 2320 CR-3****Geomorphology**

Students will examine geological and environmental processes that sculpt, modify, and erode landforms at the Earth's surface. They will focus on processes taking place in or on slopes, streams, soils, groundwater, and glacial environments. Students will also examine the interrelationships between human activities and environmental degradation.

*Prerequisites: GEOG 1120*

*Co-requisites: GEOG 1110 GEOG 1110*

*Transferable (refer to transfer guide)*

**GEOG 2330 CR-3****Introduction to Hydrology**

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

*Prerequisites: GEOG 1110 and GEOG 1120*

*Transferable (refer to transfer guide)*

**GEOG 2340 CR-3****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

*Prerequisites: GEOG 1110 and GEOG 1120*

*Transferable (refer to transfer guide)*

**GEOG 2390 CR-3****Geographic Information and Data Analysis**

Students will explore techniques for describing, analyzing and visualizing geographic information. They will examine the use and application of descriptive and inferential statistical methods in geographical research.

*Prerequisites: GEOG 1101, GEOG 1110, GEOG 1120*

*Transferable (refer to transfer guide)*

**GEOG 2395 CR-3****Cartographic Techniques**

Students will study the theoretical and practical aspects of cartography. They will discuss the value of maps in geography, and will examine the techniques and appropriate uses of various maps in geographical contexts. Students will review map projections, field surveying, and topographic maps, and also construct thematic maps related to selected topics in geography. They will study other cartographic techniques, such as remote sensing (aerial photographs and satellite images), geographical information systems and computer assisted mapping.

*Prerequisites: 3 credits in GEOG at 1100-level or higher*

*Transferable (refer to transfer guide)*

**GEOG 2400 CR-3****Introduction to GIS**

Students will explain 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 GEOG 1100-level or higher*

*Transferable (refer to transfer guide)*

**GEOG 3100 CR-3****Research Methods in Human Geography**

Students will examine the scope, nature, and practices of research in human geography. They will critically analyze the advantages and limitations of selected methods, and then study how research is designed and revised through the interplay of various theoretical perspectives, their testing and their advancement through empirical studies. Students will outline and apply the sequence of sampling plans, data collection and data analysis to create a research design.

*Prerequisites: 45 credits at 1100-level or higher  
Transferable (refer to transfer guide)*

**GEOG 3120 CR-3****Space Economies**

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 of 1100 level, or higher, courses including GEOG 1101 or ECON 1101  
Not Transferable*

**GEOG 3130 CR-3****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 a contemporary social geographic issue in metropolitan Vancouver.

*Prerequisites: 18 credits of 1100 level or higher, including GEOG 1101 or SOCI 1125  
Transferable (refer to transfer guide)*

**GEOG 3210 CR-3 (formerly GEOG 2110)****Geography of Cultures**

Students will study the major traditions, themes, and theories of social and cultural geography, all within an ecological approach to the study of human societies. They will examine the character of selected world regions, analyze their present level of development, and identify socioeconomic, political, ecological, and cultural factors that influence development outcomes, past and present. Students will analyze selected rural and urban landscapes, ancient and contemporary, and discuss a series of examples of the spatial diffusion of cultural phenomena.

*Prerequisites: (GEOG 1101 or ANTH 1100) and 18 credit of 1100-level or higher courses  
Transferable (refer to transfer guide)*

**GEOG 3220 CR-3****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 of 1100 or higher, including GEOG 1101, POLI 1125 or POLI 1123  
Transferable (refer to transfer guide)*

**GEOG 3240 CR-3****Development and Globalization**

Students will examine the implications for development of the increasing interconnectedness of economic activity, using the region as a unit of analysis. They will examine development as a multifaceted and complex process of social, cultural, political and economic change, and will explore theories of how and where development occurs. Students will examine relationships between rich and poor countries with attention to how links between regions have changed over time. They will pay particular attention to relationships between the multinational corporation and the state in the context of long-run technological change.

*Prerequisites: GEOG 2120 and 18 credits of any 1100-level or higher courses  
Transferable (refer to transfer guide)*

**GEOG 3260 CR-3****Geographic Thought**

Students will critically examine the perspectives, concepts, theories, and methodologies characteristic of geographic thought and the discipline of Geography. They will survey the historical development of geographic thought both before and after the establishment of Geography as a modern university discipline. Students will assess contemporary approaches to geographic knowledge within physical and human geography, and debates about Geography's ability to provide a holistic perspective to challenges facing humanity.

*Prerequisites: 18 credits of 1100-level or higher, including GEOG 1101, GEOG 1110 and GEOG 1120  
Transferable (refer to transfer guide)*

**GEOG 3310 CR-3****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: GEOG 1110 and GEOG 1120 and 18 credits of any 1100-level course  
Transferable (refer to transfer guide)*

**GEOG 3320 CR-3****Seminar in Natural Resource Management**

Students will examine the character, roles, and interactions among the private sector, public sector, and non-government organizations in the management of resource bases in selected countries and regions worldwide. They will discuss critically a range of conceptualizations of resources, and approaches to their management, including the effectiveness of those management systems in addressing environmental issues, preserving ecological capital, and achieving socioeconomic goals.

Note: This is a seminar course

*Prerequisites: Any 18 credits of 1100-level or higher, including 3 credits of GEOG 1160 or GEOG 2140 or GEOG 2170 or GEOG 2185 or GEOG 2190*

*Transferable (refer to transfer guide)*

**GEOG 4350 CR-3****Climate Change**

Students will evaluate the causes of climate change, including the scope and significance of human modifications of the earth's surface and atmospheric composition. They will examine the controls on global-scale climate, investigate climate change assessments at a variety of time-scales, assess proxy measurements of climate change, and explore the modeling of future climate projections. Students will survey the impacts of climate change on human society, and evaluate efforts to mitigate the process and effects of climate change.

*Prerequisites: 45 credits at 1100-level or higher, including GEOG 2310*

*Transferable (refer to transfer guide)*

**GEOG 4380 CR-3****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: GEOG 2400 plus 18 credits of 1100-level or higher courses*

*Transferable (refer to transfer guide)*

**GEOG 4501 CR-3****Special Topics in Geography**

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 at the 1100-level or higher, including GEOG 1101, GEOG 1110 and GEOG 1120*

**GEOG 4599 CR-3****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 in GEOG*