

GEOGRAPHY (GEOG)

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

GEOG 1101 **3 Credits** **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 **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

Transferable (refer to transfer guide)

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

Transferable (refer to transfer guide)

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.

Transferable (refer to transfer guide)

GEOG 2140 **3 Credits** **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 **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)

Transferable (refer to transfer guide)

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 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 (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.

Transferable (refer to transfer guide)

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 of 1100 level or higher

Transferable (refer to transfer guide)

GEOG 2310 **3 Credits**
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)
Attributes: QUAN
Transferable (refer to transfer guide)

GEOG 2320 **3 Credits**
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
Attributes: QUAN
Transferable (refer to transfer guide)

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
Prerequisites: GEOG 1110 and GEOG 1120
Transferable (refer to transfer guide)

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 of 1100 level or higher
Transferable (refer to transfer guide)

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
Transferable (refer to transfer guide)

GEOG 2400 **3 Credits**
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
Attributes: QUAN
Transferable (refer to transfer guide)

GEOG 3120 **3 Credits**
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 **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 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 3220 **Urban Politics and Planning** **3 Credits**

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 **Development and Globalization** **3 Credits**

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 **Geographic Thought** **3 Credits**

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 **Natural Hazards** **3 Credits**

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 **Environment and Resources** **3 Credits**

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: Any 18 credits of 1100-level or higher, including 3 credits of GEOG 1101 or GEOG 1110 or GEOG 1120

Transferable (refer to transfer guide)

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

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 of 1100 level or higher, including GEOG 1110 and 1120

Transferable (refer to transfer guide)

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

Students will critically analyze and apply the procedures for developing a major research project. They will formulate a geographic research question situated within a broader theoretical and empirical context. They will identify and evaluate the methods relevant to their research question, critically analyze the advantages and limitations of selected methods, identify an appropriate sampling frame, and develop a research plan. Students will analyze the practical demands of geographic research, including budgeting, accessing financial support, and navigating institutional frameworks for the oversight of research. They will apply these considerations to their research plan, and also develop strategies and processes for the dissemination, including publication, of research findings.

Prerequisites: 45 credits of 1100 or higher, including GEOG 2380 and GEOG 2390 and GEOG 2400

Not Transferable

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

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

Transferable (refer to transfer guide)

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

Not Transferable

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 in GEOG