

medical geography in general and to examine recent trends in the geographic variation of health.

GEOG 3130 Geographical Thought (3,2,1)

This course aims at introducing geography majors to the more philosophical and methodological discussions in the field. Because what geographers do is complex, and the complexity is ever-changing, they tend to have excelled on different aspects of the field and, conversely, ignored its more philosophical and methodological underpinnings. This course is an attempt to redress this imbalance. It surveys the main trends in Western geographic thought over the last hundred years and investigates in detail a few theories of the last thirty years, including the quantitative revolution, humanistic geography, radical geography, locality studies and post-modernism. A brief introduction to the Chinese geographic thought is also provided as a complement. It is hoped that after taking this course, Geography majors would be able to tackle the philosophical and methodological themes in contemporary geographic thought and make sense of their own identity.

GEOG 3580 Honours Project (3,*,*)

Prerequisite: BSocSc (Hons) in China Studies Year III standing
A required course the purposes of which are to provide actual research experience and an opportunity to undertake a syncretical approach. Students are expected, under the guidance of teaching staff, to conduct a study on aspects of Chinese geography. Identification of a research problem, an understanding of the relevant methodological and theoretical issues, proper use of field and secondary data, adequate citation of the literature, and the writing of a research paper are important ingredients of the research process.

GEOG 3590 Field Camp (0,*,*)

Field camp will be held during the second semester of a student's second year and covers a seven- to nine-day period. Usually it is based in southern China or Southeast Asia. A wide range of geographical field techniques are utilized in the collection of geographic information and for conducting field research into physical, cultural and developmental problems. While no grades or unit credits are given for this camp, the student must complete the programme to the department's satisfaction for graduation.

GEOG 3591-2 Honours Project (3,*,*)

Prerequisite: GEOG 3590 Field Camp
This is an independent honours project to be taken during the third year of study of BSocSc (Hons) in Geography and normally concerns a particular geographic problem relating to Hong Kong. The project topic is to be selected in consultation with a departmental adviser. Evidence of original research and presentation of professional quality is required.

GEOG 3600 Geographical Information Systems (3,2,1)

Prerequisite: GEOG 1150 Cartography
Geographical Information System (GIS) is an information system that is specially designed for handling spatial (or geographical) data. It combines a set of interrelated sub-systems that create, edit, manipulate, analyse and display data both in text and graphic forms. GIS supports spatial analysis and modelling for the discipline of geography (e.g. location, proximity, and spatial distribution), so that it becomes a vital tool for modern geography. With the rapid progress of computing and Internet technology, GIS technology allows easy and fast access to important geographical information on the region, environment and society.

GEOG 3610 Remote Sensing and Image Interpretation (3,2,1)

Remote sensing is defined as the science and art of acquiring information about material objects without being in touch with them. These measurements are possible with advanced airborne and space-borne remote sensing platforms and sensors that are capable of observing any part of the world frequently with various details. It is discovered that each earth cover has its own spectral

reflectance characteristics. The characteristics are so unique that they are called "signature" which enable us to discern the objects from its intermixed background. The final remote sensing process is completed by the analysis of the data using image interpretation and image processing techniques. Some key elements, or cues from the imagery, such as shape, size, pattern, tone or colour, shadow and association, are used to identify a variety of features on earth. The techniques of image interpretation can be further enhanced by the techniques of image processing that can restore, enhance and extract geographical information from original remote sensing images. These altogether yield valuable information on earth resources and living environment of human beings.

GEOG 3620 Advanced Climatology (3,2,1)

Prerequisite: GEOG 1200 Earth Systems: Atmosphere and Biosphere or consent of the instructor

An introduction to synoptic climatological methods and applications, with particular emphasis on the climate of China. Climate change and climate modelling are also discussed and provide a comprehensive introduction to applied climatology.

GEOG 3630 Advanced Quantitative Methods in Geography (3,2,1)

Prerequisite: GEOG 1130 Introduction to Quantitative Methods in Geography or consent of the instructor

This course teaches students the application of quantitative methods to geographic problem solving. Statistical methods that are commonly used in geography and regional analysis and spatial analysis methods are introduced. Emphasis is placed on the application of analytical tools to real-world geographic problems and interpretation of analysis results. Topics include regression models, factor analysis, spatial pattern analysis and cluster analysis, etc. The course also provides students with opportunities to learn one of the most widely used statistical software for social sciences—SPSS.

GEOG 3640 Applied Geomorphology (3,2,1)

An examination of the applied aspects of geomorphology and development of the student's knowledge and understanding of Earth surface processes and landscape development. Emphasis is placed on the interaction of man and the physical environment using case histories throughout the world, but with emphasis on the Southeast Asia. Attention is given to methods of measurement, monitoring and interpretation of collected data from various spheres. Field study will be required.

GEOG 3650 Geography of Economic Development (3,2,1)

An analysis of the economic problems and prospects of developing countries. A variety of ideological perspectives on the development experiences of developing countries are examined, and assessment is made of the different economic strategies which have been used in attempts to alleviate problems.

GEOG 3660 Political Geography (3,3,0)

An examination of how geographical factors affect political organization at national and international levels. The effects of geographic elements such as territory, population, boundaries, and distance from the sea are covered, followed by a treatment of the capital, the core area of a state, selection of a unitary or federal form of government, emergence of the Third World following the dismemberment of the colonial empires, supra-national organizations, and the complex issues involved in the law of the sea treaty. Moreover, certain major theories in political geography are presented.

GEOG 3670 Geography of Transportation (3,3,0)

This is an introductory course of transportation geography. It first introduces some economical and spatial aspects of transportation geography and various transportation systems. In this connection, the basic concepts of supply chain management and logistics will be introduced. This is followed by the introduction of two important transportation analysis methods: spatial interaction

and network analysis. Next, characteristics of urban travel and problems related to urban transportation are discussed. The final module of the course deals with the externalities of transportation activities in the context of sustainable transportation and policies that may mitigate traffic congestion and meet the objective of sustainable development.

GEOG 3680 Coastal Environments and Processes (3,2,1)

Much of the territorial area of Hong Kong and southern China lies below sea level, yet few people are fully aware of how coastal processes operate or what marine resources and problems exist. This course will familiarize students with the processes that dominate local marine settings and introduce them to major coastal environments, especially in the Hong Kong region. It also aims at developing an understanding and awareness of management issues relating to the offshore areas of the territory and the adjacent South China coastline. Offshore and onshore fieldwork form an integral part of this course.

GEOG 3710 Urban Planning (3,3,0)

Prerequisite: GEOG 2180 Urban Geography or consent of the instructor

Theoretical, practical, and methodological issues in policy studies and urban planning are addressed. Urban planning practices in Hong Kong are illustrated. Towards the end of the course, students are expected to conduct independent projects in which they should demonstrate their abilities to (1) identify planning problems, (2) diagnose the cause of such problems, and (3) propose logical strategies to resolve the problems. Fieldwork may be required.

GEOG 3720 Seminar in Environmental Planning and Management (3,3,0)

Prerequisite: GEOG 2140 Environmental Conservation or consent of the instructor

A discussion of the major approaches to environmental planning and management. Focus is placed on the long-term well-being of this planet and its inhabitants which require the development of a sustainable society—one that conserves natural resources, recycles, reduces pollution, and controls population growth. The legal, technical, and practical solutions to these problems are also examined.

GEOG 3730 Seminar in Energy Problems (3,3,0)

Prerequisite: GEOG 2160 Energy Problems and the Environment or consent of the instructor

Partly built upon GEOG 2160 Energy Problems and the Environment, this course focuses on the construction of national energy policies. Apart from the factors discussed in the previous course, other factors that affect the formulation of a national energy policy are treated, including environmental factors like thermal and air pollution, patterns of sectoral consumption of energy, energy intensiveness of economy, energy conservation, and the role of non-conventional sources such as wind, solar and geothermal energy. Case studies of energy policies of selected Asian countries are covered, together with substantial research on an energy topic.

GEOG 3740 Urban Cultural Landscape (3,3,0)

This course looks into the urban landscape, specifically (1) its evolution and changes, (2) its symbolic meanings and effects on urban living, as well as (3) issues in relation to its planning and design. It also introduces students to the practices of some professions, such as urban design, landscape architecture, and public art, which deal with culture and urban landscapes.

GEOG 3750 Seminar in Urban Geography (3,3,0)

Prerequisite: GEOG 2180 Urban Geography

An in-depth study of selected topics in urban geography. Students are guided through specific research on concrete urban problems both in Hong Kong and in mainland China. Analytical techniques and theoretical issues are stressed throughout the course. Some field study in Hong Kong and mainland China may be required.

GEOG 3760 Urban Development and Planning in Hong Kong (3,3,0)

Prerequisite: GEOG 3710 Urban Planning or consent of the instructor

Urban Hong Kong has developed rapidly since the 1950s. The built environment has expanded from the one concentrated on the two sides of the Victoria Harbour to the one encroaching into the New Territories and even spreading across the boundary to Shenzhen. What are the salient features of urban development, both in the inner city and at the periphery? Is it business-biased? Is it over-dominated by the property sector? How to interpret its growth pattern and dynamics? What is the role of the Hong Kong Government? What is about urban planning? It is the objective of this course to address these questions by drawing on the latest informed theories and many empirical studies. This course would be of interest to anyone who dares to know more about urban Hong Kong and develop an urban model within the broader contexts of China, Asia and the West.

GEOG 3790 Seminar in Social Geography (3,3,0)

An analysis of (1) the scope and nature of social geography, (2) the interactive relationships between social processes and the characteristics of places, (3) the significance of both public and private institutions in the transformation of the environment, and (4) the nature and characteristics of social problems in urban and rural societies. Fieldwork may be required.

GEOG 3830 Population Geography of China (3,2,1)

Prerequisite: GEOG 2150 Population Geography or SOC 2220 Population Studies

An in-depth analysis of China's population from a spatial point of view. Specifically the course will examine the integration of population planning in socialist China and its relationship with the four modernizations.

GEOG 3840 Energy Development in China (3,3,0)

Prerequisite: GEOG 2160 Energy Problems and the Environment or consent of the instructor

In the past two decades, momentous changes occurred in the Chinese energy sector, including changes in the institutional framework—moving from state allocation to the market economy—and with respect to individual energy industries. By the mid-1990s, the problem of energy shortage had largely been resolved, yet the country had become a net oil importer, and is projected to import an increasingly larger amount in the future, with serious implications for the security of energy supply and future oil import outlay. The course takes a comprehensive survey of the Chinese energy sector, including the resource endowment, energy policy since the 1980s, the major energy industries like oil, coal, natural gas, electricity—HEP and nuclear included—and the international energy trade of China. Current issues such as the Three Gorges Dam and the West-East Pipeline are also dealt with.

GEOG 3850 Resource Management in China (3,3,0)

This course introduces the concepts, knowledge and skills in natural resource evaluation and management, with the emphasis on and the real-world cases in China. The course is presented in two major parts. The first part begins with the introduction to the concepts about the natural resources and their distribution in China. This is followed by an extensive study on methodology for land and water resource evaluation. The second part presents details about the nature, distribution and utilisation of natural resources in China. The environmental conservation and sustainable development in relation to natural resources are also discussed in the subject. Laboratory works for this course focus on resource assessment methods with the aid of remote sensing and geographical information system (GIS) technology. A field excursion to China's mainland is also used to practise field methods for land resource evaluation, and the first-hand experience in the regional natural resources management.