

GEOG 1005 Geography and the Contemporary World (3,3,0) (E)

The course deals with the complex physical and cultural realities of the world. It adopts a topical approach, encompassing major issues in the contemporary world and studies these issues from a geographical perspective. It is designed in a manner that helps students to understand the varied and complex environmental interactions of the Earth. The course also assists students in recognizing the diverse ways in which geography can open new horizons and contribute to the building of an environmentally and culturally sustainable world.

GEOG 1130 Introduction to Quantitative Methods in Geography (3,2,1) (E)

This course provides an introduction to statistical analysis of geographic data. Through real-world examples from various topic areas of geography, students learn sampling methods, descriptive and inferential statistical techniques for analysing geographic data. Topics include hypothesis testing, spatial statistics, statistical relationships between variables, and how to generate, summarize and present geographic data, etc. The course will facilitate students a knowledge basis for understanding more advanced methods of geographic analysis.

GEOG 1150 Cartography (3,2,2) (E)

Cartography is the art, science and technology of making maps. The process of map-making often involves five steps, that is, selection of a number of features in the real world, classification of selected features into groups, simplification of jagged lines like coastlines, exaggeration of features that are too small to show at the scale of the map, and symbolization to present the different classes of features chosen. Understanding of this process and pursuit of the skills will greatly enhance the presentation of geographic information in graphic format. Moreover, this format can be an effective tool for data analysis such as examining the relationship between two distributions using simple transparent overlays. Students of geography can apply such a mapping ability to their natural or social science courses or in their professional fields. The course also aims to introduce basic concepts and application skills of using geographical information system (GIS) to input, manage, retrieve and display geographical information.

GEOG 1160 Cultures, Peoples and Landscapes (3,2,1) (E)

This course examines the nature and development of cultural geography and landscape studies as major fields of studies in human geography. It explores the interactive relationship between culture, social organization, human action, landscape features and the variation of place characteristics over space. It focuses especially on (1) what by "culture" is meant, (2) how culture evolves, develops, diffuses and changes, and (3) how we shall explain and understand the interactive relationship between culture, society and place characteristics, especially within the dynamic and rapidly changing contexts of urban societies.

GEOG 1190 Earth Systems: Shaping Landscapes (3,2,1) (E)

This course introduces geomorphology and demonstrates the main facets contributing to the scientific study of landforms. Emphases are placed on plate tectonic theory, that is used as a framework to explain the Earth's major relief features, their development and structure, and the associated landforms; and the processes of weathering, erosion and deposition with regard to landform development especially in Hong Kong.

GEOG 1200 Earth Systems: Atmosphere and Biosphere (3,2,1) (E)

The first part introduces climatology. Emphases are placed on atmospheric motion and climate change. The second part is a comprehensive analysis of the development and characteristics of soil and vegetation on the Earth's surface. Emphasis is placed on their distribution, soil-plant interactions and their significance in human's use of land.

GEOG 1210 Globalization of Economic Activities (3,2,1) (E)

This course introduces students to the world phenomenon of globalization of economic activities. It is imperative for students in Geography to be aware of the basic features and the processes of economic globalization: What is it? Who are the main actors behind it? How did it happen? What are the implications for the spatial organization of economic production and the patterns of urban agglomerations at various geographic scales: the world, the nation, and the region? This course aims at providing a systematic introduction to these basic features.

GEOG 1610 People and the Physical Environment (3,3,0) (E)

Students are introduced to the processes and problems associated with the physical environment in which people live, and examines how humans, in turn, influence and control their surroundings. Contemporary problems such as global warming, ozone depletion and desertification are examined. Special emphasis is given to examples from Hong Kong and China. This course is not open to Geography majors.

GEOG 1620 Hong Kong and the Pearl River Delta: A Survey (3,2,1) (E)

This course provides a comprehensive and lively guide to the history, culture, geography and economic development of South China. This objective is to be achieved by a series of well-organized lectures and tutorials. Field trips, both in Hong Kong and to the Pearl River Delta, which will provide an invaluable on-site experience to elaborate the types and magnitude of change in South China discussed in lectures, may be organized. It is hoped that this course will constitute an essential gateway to those wishing to acquire a deeper understanding of this dynamic corner of Asia.

GEOG 1630 Geography, Information Technology and Modern Life (3,3,0)

This is an introduction course to the application of geo-spatial information technology. It is designed as a complementary course for non-geography major students for the awareness and understanding of applications of modern technology to geographical issues. The course will emphasize the use of GIS, GPS and remote sensing to solve some common problems and issues in today's industry and the modern life of the society. The currently available resources of geographical data and data processing tools for various typical applications will also be introduced.

GEOG 1640 Energy, Environment and Sustainability (3,3,0)

Climate change and the depletion of energy resources are issues of major international concern in the contemporary world. The focus of this course is on the multiple and intricate relationships between energy, environment and sustainability issues. It allows students to fully understand the subject matter from both the natural science and social science perspectives. Through appropriate real-life examples, the course aims to guide students, in an exploration of viable alternative energy sources and to enable them to embark on a way of life that promotes a clean and sustainable use of energy resources. In addition to classroom learning, the teaching will be supplemented by field visits, demonstrations, group projects and debates.

GEOG 2005 Cultures, Peoples and Landscapes (3,2,1) (E)

The course examines how geographic location and people's cultural identities shape landscapes from both a physical setting and a symbolic construction point of view. Places or locations can be linked physically through processes of migration, tourism, trade, and investment, and represented (or "imagined") through media such as newspapers, film, music, art and literature. These processes are influenced by, and impact on, the natural and cultural landscapes.

GEOG 2006 Earth Systems: Shaping Landscapes (3,2,1) (E)

This course is complementary with GEOG 2016 Earth Systems: Atmosphere and Biosphere and introduces geomorphology and the main facets that have contributed to the study of landforms. Emphases are placed on: plate tectonic theory, as a framework to explain the major relief features of eastern Asia; on common geological materials and structures that control landscape in Hong Kong; and on the processes of weathering, erosion and deposition that produce contrasting landscapes.

GEOG 2007 Introduction to Quantitative Methods in Geography (3,2,1) (E)

This course provides an introduction into statistical analysis of geographic data. Through real-world examples from various topic areas of geography, students learn sampling methods, descriptive and inferential statistical techniques for analysing geographic data. Topics include hypothesis testing, spatial statistics, statistical relationships between variables, and how to generate, summarize and present geographic data, etc. The course will assist students in developing a knowledge basis for understanding more advanced methods of geographic analysis.

GEOG 2015 Cartography (3,2,2) (E)

Cartography is the art, science and technology of making maps. Maps are the communication media for geographers to express their views about our world, in a similar way that language is for literary authors. Understanding of map-making processes and mastering the skills of map-reading greatly enhance the presentation of geographical information in graphic format. Moreover, this format can be an effective tool for data analyses such as, for example, when examining the relationship between two distributions using simple transparent overlays. Students can apply such a mapping ability to their natural or social science courses or in their professional fields.

GEOG 2016 Earth Systems: Atmosphere and Biosphere (3,2,1) (E)

This course seeks to provide understanding of the ecosystem essentials and the atmospheric processes governing weather and climate. The first part is a comprehensive analysis of the characteristics of vegetation on the earth's surface. Emphasis is placed on their distribution, and their significance in human's use of land. The second part introduces climatology. Emphases are placed on energy flow and temperature, atmospheric moisture, atmospheric circulation, climate classification and climate change.

GEOG 2017 Globalization of Economic Activities (3,2,1) (E)

This is an introductory course on economic geography. Students are first introduced to the basic features of economic globalization and their geographic ramifications. The course then describes in some detail the major forces and processes that underlie global production shifts, identifying the main actors involved and outlining the implications for the spatial organization of economic activities at various geographic scales: world, nation and region.

GEOG 2025 Hong Kong and the Pearl River Delta: A Survey (3,2,1) (E)

This course provides a comprehensive and lively guide to the history, culture, geography and economic development of South China. This objective is to be achieved by a series of well-organized lectures and tutorials. Field trips, both in Hong Kong and to the Pearl River Delta, which will provide an invaluable onsite experience to elaborate the types and magnitude of change in South China discussed in lectures, may be organized. It is hoped that this course will constitute an essential gateway to those wishing to acquire a deeper understanding of this dynamic corner of Asia.

GEOG 2110 Regional Geography of China (3,3,0) (E)

Regional geography is concerned with geographical synthesis with a specific "region" as its focus. The course is an introductory and

foundation course which aims to familiarize students with broad aspects of development in China, including its human, physical, cultural and economic activities and also their impact on the environment and landscape.

GEOG 2140 Global Environmental Issues and Sustainability (3,2,1) (E)

This course covers environmental problems in the atmosphere, hydrosphere, lithosphere and the biosphere. Sustainability is the over-arching theme of this concept-centred, solution-oriented, and science-based course on contemporary environmental problems. Field and laboratory study form an integral part of the course.

GEOG 2150 Population Geography (3,2,1)

This course aims at familiarizing students with concepts and methodologies to examine population problems and evaluate population policies from a geographical perspective. The course is concerned with conceptualizing and measuring population structure and its dynamics. It explains the way in which populations are distributed through space and over time, together with various factors that generate changes. In particular, the evolving patterns of fertility, mortality and migration are examined from both spatial and temporal perspectives.

GEOG 2160 Energy Problems and the Environment (3,3,0) (E)

An introduction to the causes and effects of the energy problems which have arisen since 1973. The major sources of commercial energy—oil, coal and natural gas—are treated with respect to their characteristics, exploration and development, major uses, world production pattern, pricing and trade. The special role of electricity, together with problems connected with nuclear power, is covered. Furthermore, the nature and the ramifications of the 1973, 1980 and 2008 oil crises are discussed.

GEOG 2180 Urban Geography (3,2,1) (E)

An introduction to contemporary theories of urbanization, urban hierarchy, and the internal structure of the city. Such theories are related to empirical studies in geography and discuss the complex relationships between urban growth and social, economic, technological, and environmental changes in human society. Some field-study may be required.

GEOG 2320 Geography of Pacific Asia (3,3,0) (E)

This course introduces students to various aspects of the geography of Pacific Asia. The major concerns include economic and social progress, political evolution, physical advantages and constraints, resource bases, rural development, urbanization, industrialization and government policies in the economic development. In addition, economic and political relations between countries in the region are discussed. Reference will also be made to the spatial aspects of contemporary issues in Southeast Asia, the Pacific Island Region, Australia and New Zealand.

GEOG 2600 Techniques in Physical Geography (3,2,1)

This course introduces (1) the field and laboratory techniques in geomorphology and biogeography, and (2) the use of meteorological instrument and ways to access and analyse weather maps/images.

GEOG 2800 Geography of Health and the Environment (3,3,0)

Since ancient times, people have worked, lived and multiplied under a wide variety of environmental conditions. According to Chinese medical theory, human health is affected by a lack of equilibrium between body and its surrounding environment. This is especially the case where the ecology of the environment is abnormal. Consequently, geographic variability has long been an important aspect of health studies in both Eastern and Western cultures. This has been expressed in a variety of approaches ranging from geographic pathology to medical ecology, as well as disciplines such as geographical epidemiology, biometeorology, geomedicine, and so forth. This course aims to introduce

students to the concepts and techniques in the discipline of medical geography in general and to examine recent trends in the geographic variation of health.

GEOG 3005 Field Camp (0,*,*)

Field camp will be held during the second semester of a student's third year and covers a seven- to nine-day period. Usually it is based in 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 3006 Regional Geography of China (3,3,0)

This is an introductory course on the geography of China. A regional approach is employed to provide students a comprehensive collection of topics over the physical setting, natural resources, population, urban and regional development, industrial and agricultural development, administrative system and geopolitics. These topics span across the time period before and after the country launched its economic reform. This course covers not only topics on social, economic and environmental issues, but also introduces a perspective to understand these activities and their changes.

GEOG 3007 Energy Problems and the Environment (3,3,0) (E)

This course introduces students to the causes and effects of the energy problems which have arisen since 1973. The major sources of commercial energy—oil, coal and natural gas—are treated with respect to their special characteristics, exploration and development, major uses, world production pattern, pricing and trade. The special role of electricity, together with problems connected with nuclear power, is covered. Furthermore, the nature and ramifications of the 1973, 1980 and recent oil crises are discussed.

GEOG 3015 Geography of Health and the Environment (3,3,0)

Since ancient times, people have worked, lived and multiplied under a wide variety of environmental conditions. According to Chinese medical theory, human health is affected by a lack of equilibrium between body and its surrounding environment. This is especially the case where the ecology of the environment is abnormal. Consequently, geographic variability has long been an important aspect of health studies in both Eastern and Western cultures. This has been expressed in a variety of approaches ranging from geographic pathology to medical ecology, as well as disciplines such as geographical epidemiology, biometeorology, geomedicine, and so forth. The course provides an introduction to the concepts and techniques in the discipline of medical geography and to examine recent trends in the geographic variation of health.

GEOG 3016 Geography of Pacific Asia (3,3,0) (E)

The Pacific Asia region covers vast areas of the Russian Far East, East and Southeast Asia, Australia, New Zealand, and many Pacific Island nations. It is very rich in natural resources, history, culture, economy, and political systems. Since the 1970s, the Region has experienced rapid socioeconomic development. With globalization and the emergence of the Chinese economy, in particular, Pacific Asia has become a powerful "engine" for the world development.

GEOG 3017 Global Environment Issues and Sustainability (3,2,1) (E)

This course covers environmental problems in the atmosphere, hydrosphere, lithosphere and the biosphere. Sustainability is the over-arching theme of this concept-centred, solution-oriented, and science-based course on contemporary environmental problems. Field and laboratory study form an integral part of the course.

GEOG 3025 Population Geography (3,2,1)

This course teaches students with concepts and methodologies to examine population problems and evaluate population policies from a geographical perspective. The course is concerned with conceptualizing and measuring population structure and its dynamics. It explains the way in which populations are distributed through space and over time, together with various factors that generate changes. In particular, the evolving patterns of fertility, mortality and migration are examined from both spatial and temporal perspectives.

GEOG 3026 Techniques in Physical Geography (3,2,1)

This course introduces (1) the field and laboratory techniques in geomorphology and biogeography, and (2) the use of meteorological instruments and ways to access and analyse weather maps/images.

GEOG 3027 Urban Geography (3,2,1) (E)

We live in an urbanizing world today. It is, thus, imperative to have a basic understanding of this still growing urban phenomenon. The perspective of urban geography emphasizes the production of spatial differences among cities of the world. What is the nature and scope of urban geography? When, where and why did cities arise? How has globalisation affected the growth of cities recently? Why are cities in the Third World growing faster than those in the developed world? Are the socialist cities planned without socio-economic problems? How do we understand urban systems in any country? What are the major socio-economic and spatial features of cities? What are the differences among the developed world, the Third World and the socialist world?

GEOG 3130 Geographical Imaginations (3,2,1) (E)

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 synthetic 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 (3,2,2) (E)

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 (3,2,2) (E)

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 (3,3,0) (E)

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) (E)

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) (E)

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 (3,3,0) (E)

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) (E)

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 (3,2,1) (E)

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 (3,2,1) (E)

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) (E)

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 Energy Policy and Analysis (3,3,0) (E)

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) (E)

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 (3,2,1) (E) in Hong Kong

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) (E)

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 (3,2,1) (P)

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.

GEOG 3860 Problems in the Physical Geography of China (3,3,0)

Prerequisite: GEOG 2110 Regional Geography of China

An examination of how the various physical processes interact with China's socio-political milieu to effect the current physical landscapes and the kinds of environmental problems that the country has to face. A problem-oriented approach, with a view to improving the management of China's physical/environmental system, is adopted.

GEOG 3870 Geography of Environmental Hazards (3,3,0) (E)

Natural hazards research in a geographical context are introduced. The course provides a comprehensive introduction to the causes of climatic and geological hazards, and human response and adjustment.

GEOG 3880 Rural and Agricultural Development in China (3,2,1) (C)

Prerequisite: GEOG 2110 Regional Geography of China or consent of the instructor

An examination of (1) the physical and historical factors affecting China's agriculture, (2) institutional changes since 1949 in China's rural sector, and (3) underlying contemporary problems and programmes concerning agricultural growth and rural development. Field study in China may be required.

GEOG 3890 Urban Development in China (3,3,0) (E)

Prerequisite: GEOG 2110 Regional Geography of China or consent of the instructor

This course will provide an insight into the internal structure and external linkage of Chinese cities, and analysis of problems, policies and reforms in China's urbanization and urban economy. Field study in China may be required.

GEOG 3910 Selected Topics in the Geography of China (3,3,0)

An in-depth study of selected issues in the contemporary geography of China. The major socio-economic topics or physical/environmental topics to be discussed have been intentionally designed to be flexible.

GEOG 4005 Advanced Climatology (3,3,0)

Prerequisite: GEOG 2016 Earth System: Atmosphere and Biosphere or consent of the instructor

This course introduces selected scopes of climatology. They include an introduction to synoptic climatological methods and applications, with particular emphasis on the climate of China, climate change and climate modelling, and a comprehensive introduction to applied climatology.

GEOG 4006 Advanced Quantitative Methods in Geography (3,2,1)

Prerequisite: GEOG 2007 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 studies 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. The course also teaches students one of the most widely used statistical software programmes for social sciences-SPSS. Topics include Analysis of Variance (ANOVA), regression models, factor analysis, spatial pattern analysis and cluster analysis, etc.

GEOG 4007 Applied Geomorphology (3,2,1) (E)

The course develops a student's knowledge and understanding of modern earth surface processes and landscape development. Emphasis is placed on human impacts on the natural landscape of Hong Kong. Special attention is given to methods of measurement, monitoring and interpretation of collected data from various natural environments. Fieldwork is an essential component.

GEOG 4015 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 familiarise students with the processes that dominate local marine settings and introduces them to major coastal environments, especially in the Hong Kong region.

GEOG 4016 Energy Development in China (3,3,0)

Prerequisite: GEOG 3007 Energy Problems and the Environment or consent of the instructor

Energy used to be a serious bottleneck in the economic development of China in the 1980s when the country first opened up to the outside world. In the past three 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 (which re-appeared in another form lately), yet the country has 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 West–East Pipeline and looming energy security issues are also dealt with.

GEOG 4017 Geographical Information Systems (3,2,2)

Prerequisite: GEOG 2015 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 within the discipline of geography (e.g. location, proximity, and spatial distribution), making it a vital tool for modern geography.

GEOG 4025 Geographical Imaginations (3,2,1) (E)

This course introduces geography students to the major philosophical and methodological discussions in the field. “What do geographers do?”, “how do they differ from other social scientists such as economists and sociologists?” and “how are geography works influenced by different schools of philosophical thought?” This course attempts to answer these questions by investigating the main trends in Western geographic thinking since the 20th century. Also, a brief introduction to Chinese geographic thought is provided.

GEOG 4026 Geography of Economic Development (3,3,0)

This course provides an in-depth understanding on development issues. A variety of theories and strategies on economic development are investigated. Special emphasis is given to the development experience of Asian countries, in particular Hong Kong, Singapore and South Korea. The notion of globalization and its impact on regional economic development will be examined.

GEOG 4027 Geography of Environmental Hazards (3,3,0) (E)

Environmental hazards such as earthquakes, volcanic eruptions, flooding, landslides, typhoons and air/water pollution have a huge impact on our lives and, with a growing world population, there is an increasing need to understand how these hazards can be reduced. This course introduces environmental hazard research in a geographical context. The course provides a comprehensive introduction to the causes of climatic and geological hazards and environmental health hazards, and human responses and adjustments.

GEOG 4035 Geography of Transportation (3,2,1) (E)

This is an introductory course on transportation geography. It first introduces the economical and spatial concepts underlying transportation geography and transportation systems. Next, the development history and experience of China's transportation systems will be outlined and discussed. Basic concepts of logistics and geography will be introduced and form the basis for discussion of Hong Kong as a transportation hub. 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 outlined. 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 4036 Political Geography (3,3,0)

This course examines how geographical factors affect political organization at the national and international level. 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 and globalization are presented.

GEOG 4037 Population Geography of China (3,2,1)

Prerequisite: GEOG 3025 Population Geography or consent of the instructor

This course provides 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 4045 Problems in the Physical Geography of China (3,3,0)

Prerequisite: GEOG 3006 or CHSG 3006 Regional Geography of China

This course presents an examination of how the various physical

processes interact with China's socio-political milieu to affect the current physical landscapes and the kinds of environmental problems that the country has to face. This involves a problem-oriented approach, with a view to improving the sustainability of China's physical/environmental system.

GEOG 4046 Remote Sensing and Image Interpretation (3,2,2) (E)

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 4047 Resource Management in China (3,2,1) (P)

This course introduces the concepts, knowledge and skills in natural resource evaluation and management, with the emphasis 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. Environmental conservation and sustainable development in relation to natural resources are also discussed. Laboratory work for this course focus on resource assessment methods with the aid of remote sensing and geographical information system (GIS) technology.

GEOG 4055 Rural and Agricultural Development in China (3,2,1)

This course employs a geographical perspective to investigate issues concerning rural and agricultural development in contemporary China. Focus is put on the social and economic spheres and how the dynamics of change since 1978 have affected these spaces. A variety of spatial variations on development experiences are investigated to show how space makes a difference.

GEOG 4056 Selected Topics in the Geography of China (Human Geography) (3,3,0)

This course involves an in-depth study of selected issues in the contemporary geography of China. The major socio-economic topics or physical/environmental topics to be discussed have been intentionally designed to be flexible.

GEOG 4057 Selected Topics in the Geography of China (Physical and Environmental Geography) (3,3,0)

This course involves an in-depth study of selected issues in the contemporary geography of China. The major socio-economic topics or physical/environmental topics to be discussed have been intentionally designed to be flexible.

GEOG 4065 Energy Policy and Analysis (3,3,0)

Prerequisite: GEOG 3007 Energy Problems and the Environment or consent of the instructor
Partly built upon GEOG 3007 Energy Problems and the Environment, this course focuses on the construction of national energy policies. Apart from the factors discussed in the

previous subject, other factors that affect the formulation of a national energy policy are treated, including pattern of sectoral consumption of energy, energy intensiveness of economy, pollution problems of energy and the role of the 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 4066 Seminar in Environmental Planning and Management (3,3,0)

Prerequisite: GEOG 3017 Global Environmental Issues and Sustainability; GEOG 3007 Energy Problems and the Environment; GEOG 3015 Geography of Health and the Environment or consent of the instructor

This course starts with a comprehensive introduction to the major principles and approaches of environmental planning and management. This is followed by in-depth analysis of several classical local environmental planning and management cases. The final part of this course will focus on the green urbanism theme by discussing how environmental planning and management profession can help to develop a sustainable low carbon city.

GEOG 4067 Seminar in Social Geography (3,3,0)

This course is concerned with the understanding of the cause and effect of how social groups and other social phenomena (such as social services, crime and delinquency, and housing provision) are distributed, especially in the urban context. The course focuses on interactions, positive or negative, beneficial or harmful, constructive or destructive.

GEOG 4075 Seminar in Urban Geography (3,3,0)

Prerequisite: GEOG 3027 Urban Geography
This course discusses in depth selected topics of major concern in the Urban Geography and Urban Studies literature. The contents of the course vary from year to year, depending on the current research focus of the instructor. Possible topics to be examined included globalization, world cities and mega-urban regions, housing, inequality and residential differentiation, urban politics and conflict resolution, and new urbanism and sustainable urban development.

GEOG 4076 Urban Cultural Landscape (3,3,0) (E)

This course looks into the urban landscape, specifically (1) its formation and evolution with time and space, (2) its symbolic meanings and effects on urban living, as well as (3) issues in relation to its planning and design.

GEOG 4077 Urban Development and Planning in Hong Kong (3,2,1) (E)

Urban Hong Kong has developed rapidly since the 1950s. The built environment has expanded from one concentrated on two sides of the Victoria Harbour to one encroaching into the New Territories and even spreading across the boundary to Shenzhen. What are the salient features of this 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 urban planning? This course will 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 4085 Urban Development in China (3,3,0)

Prerequisite: GEOG 3006 or CHSG 3006 Regional Geography of China or consent of the instructor

This course introduces students to China's immense urban transformation process. The course is divided into three parts. Part A briefly reviews the urbanization process. It deals with questions such as the nature of the urbanization process before and after reform, and the question of hukou and rural to urban migration. Part B is on the internal structure of Chinese cities, focusing on urban land development. China's changing

land use structure will be studied from various theoretical and methodological perspectives. Part C deals with on China's urban housing. The changing pattern of housing consumption is analysed in light of changing institutional contexts and China's phenomenal economic growth.

GEOG 4086 Urban Planning (3,2,1) (E)

This course introduces students to the field of urban planning. What are the concerns of urban planners? How do they make sense of the problems? What sort of skills is required of urban planning professionals? What are the effects of the urban planning process on the development of our urban areas? Initially, this course approaches urban planning by a historical analysis. We therefore, first, study how cities in Britain grew and developed since the industrial revolution. In doing so, we also trace the beginnings of "modern" Western urban planning, both as advocacies and "ideas" and as actual practices. In addition, the nature of urban planning, especially for the more recent periods, will be highlighted. Based on this preliminary understanding, we proceed to take stock of the various theories built to understand urban planning practices. In other word, the second part of the course deals with planning theory.

GEOG 4898-9 Honours Project (3,*,*)

Prerequisite: GEOG 3005 Field Camp

This is an independent honours project to be taken during the final year of study and normally concerns a particular geographic problem relating to Hong Kong. The project topic is to be selected in consultation with a department adviser. Evidence of original research and presentation of professional quality is generally required.

GEOG 7010-40 Advanced Seminar on Contemporary Geographic Research (1,*,*)

Geography encompasses a wide range of approaches to research, reflecting the diverse nature of the discipline. This course attempts to expose students to this variety, and to broaden students understanding of our human and physical environment. Emphasis is placed on the development of concepts when carrying out research and on the development of methodologies, by using case examples of geographic research.

GEOG 7510 Resource and Environmental Management in China (3,3,0)

The course introduces the concepts, knowledge and skills in analysing the environmental and resource management issues in China in five broad areas. Firstly, the course begins with a general survey of the environment-resource-population-development system of China. Secondly, it sets the background for an understanding of the basic environmental issues confronting China today, especially those problems associated with energy uses, water pollution, land degradation, and deforestation. Thirdly, the course discusses the development of the environmental management system in China, and the factors which affect the way regulators and polluters alike have responded to China's environmental controls. Fourthly, the course examines the societal responses to resource and environmental problems, particularly on the awareness and participation of the general public in resource conservation and environmental protection. Finally, the course concludes with an examination of China's Agenda 21 and strategies for sustainable development.

GEOG 7520 Urban and Regional Development of China (3,3,0)

The course provides students with an in-depth understanding of China's regional development and urban issues. Economic reform since 1979 has shifted China from a planned economy to one driven by market forces. Consequently, economic development has not only re-established cities' function as economic central places but also generates disparities between urban and rural, and different regions. These changes have generated heat discussions on the country's urbanization and regional development strategy. This includes debates on city size, small-town strategy and the

abolition of special economic zones. This course introduces students to these discussions and also recent literature on the topic.

GEOG 7530 Graduate Seminar on Geography of China (3,3,0)

Geographical and environmental concerns underpin much of contemporary China. This graduate seminar allows students to develop an in-depth understanding of selected topics on the geography of China. Students are expected to conduct critical reviews of the latest theoretical and empirical works and undertake a limited research project.

GEOG 7540 Energy Development in China (3,3,0)

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 7550 Resource Management in China (3,2,1)

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 utilization 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.

GEOG 7560 Rural and Agricultural Development in China (3,2,1)

An examination of (1) the physical and historical factors affecting China's agriculture, (2) institutional changes since 1949 in China's rural sector, and (3) underlying contemporary problems and programmes concerning agricultural growth and rural development. Field study in China may be required.

GEOG 7570 Urban Development in China (3,3,0)

This course will provide an insight into the internal structure and external linkage of Chinese cities, and analysis of problems, policies and reforms in China's urbanization and urban economy. Field study in China may be required.

GERM 1005 German I (3,3,0) (G)

This course aims to introduce the German language and culture to beginners. It combines linguistic and communicative skills with a balanced emphasis on reading, writing, speaking and listening. Special stress is placed on mastering the sound system and the basic grammatical forms, as well as building basic receptive and productive skills in German for effective daily communication. The course also helps students develop their critical thinking through in-class discussions about the cultural dimensions of the language and acquire strategies to learn "how to learn German". The aim is for them to reach EU level A1.1.