#### GEOG 4035 Geography of Transportation

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

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 4046 Remote Sensing and Image** (3,2,2)Interpretation

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.

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

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 (3,2,1) (C) Development in China

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 (3,3,0)China (Human Geography)

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 (3,3,0)China (Physical and Environmental Geography)

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

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 Justice and the City (3,3,0)

It starts with interrogating some concepts related to the ways city has developed over time. The general discussion is complemented by a brief discussion of the Hong Kong situation. It then joins the debate whether spatial justice exists ontologically different from social justice. It is in the interest of the course to develop a more dialectical understanding between social and spatial processes. A list of the social justice issues in the city is then enumerated. The method and techniques of handling these issues and, therefore, form the background for students to practise social justice in the field. These practice experiences are then interrogated in the class with the objective of formulating, more theoretically, a possible urban utopia that is socially just.

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

Prerequisite: GEOG 3027 Urban Georgraphy

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

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 (3,2,1) Hong Kong

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)

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

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 4087 Natural Resource Evaluation and (3,3,0) Policy Approaches

This course introduces concepts and methods used to estimate the value of natural resources, and discuss how such information is used for the allocation, conservation, or transformation of those resources.

## GEOG 4095 Transnational Urban Futures (3,\*,\*)

In this path-breaking course, HKBU students will co-produce knowledge with students at Georgia State University. The two groups will meet in Atlanta, USA and spend up to two weeks learning about, and researching how non-government organisations that are "faith-based" influence neighbourhoods, community, and the urban futures of Atlanta. The two groups then travel to Hong Kong and spend two weeks learning about, and researching how Hong Kong faith-based organisations influence neighbourhoods and urban futures in Hong Kong.

## 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 (1,\*,\*) Geographic Research

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 7310 Environmental Contaminants and (3,3,0) Health Risk Assessment

The course is designed to identify, characterize and evaluate environmental contaminants as they are related to human health. Topics include biological, chemical and physical contaminants (both well-known and emergent ones) in air, food, soil and water. The behaviour of these contaminants will be discussed. Methods of environmental health risk assessment and risk management will be introduced; and policy to eliminate the effects of exposure to environmental contaminants will be addressed.

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

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-populationdevelopment 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 (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 (3,3,0) of China

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