## Master of Arts in Geography Program code: 134010

## INTRODUCTION

The Department of Geography (College of Social Sciences) offers a Master of Social Sciences **Geography**. The program is designed to prepare students with field work and research abilities, enable students to participate effectively in society. Graduates will contribute to work in various ministries such as the ministry of energy, commerce, oil, planning, education and higher education, defense, municipality and airport. The program offers both thesis and non-thesis options.

According to the University Council decision dated 4/2/2007, Thesis students admitted with effect from September 2007 are exempted from the comprehensive examination.

## PROGRAM REQUIREMENTS

## 39 TOTAL COURSE CREDITS

## 12 (21) COMPULSORY COURSES

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1340-501	Advanced Human Geography			
1340-502	Advanced Physical Geography			
1340-504	Research Methods in Geography			
1340-511	Remote Sensing (for non-thesis option)			
	Equivalent to 2095-512 Basic Remote Sensing (RS)			
1340-515	Economic Geography and Development (for non-thesis option)			
1340-516	Geographic Information Systems			
	Equivalent to 2095-511 Basic Geographic Information System			

## 18 (18) ELECTIVES COURSES (3 Credits each)

1340-593 Capstone Project (for non-thesis option)

1340-505	Urban and Regional Planning
1340-506	Advanced Urban Geography
1340-507	Advanced Population Geography
1340-508	Desert Geomorphology
	Equivalent to 2095-506 Desert Geomorphology
1340-509	Coastal Geomorphology
	Equivalent to 2095-507 Coastal Geomorphology
1340-510	Global Environment Issues
1340-511	Remote Sensing (for thesis option)
	Equivalent to 2095-512 Basic Remote Sensing (RS)
1340-513	Advanced GIS project on Kuwait

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1340-514 Advanced Studies in Political Geography

1340-515 Economic Geography and Development (for thesis option)

1340-580 Special Topics

## 9 COMPULSORY COURSES

1340-597	Thesis	(0)
1340-598	Thesis	(0)
2000-599	Thesis	(9)

## **COURSE DESCRIPTION**

## 1340-501: ADVANCED HUMAN GEOGRAPHY CR: 3

Introduction to Human Geography. Human Cultures, Environments and Regions. Population Patterns and Changes. World Languages, Religions, Races, Ethnic Groups. Urban and Rural Changes. Economic Changes. Political World, National Power etc. Health and Diseases. Human Demographic Changes and New orders. Human Geography of the World. Human Geography of Kuwait and the GCC Countries and Arab World.

### 1340-502: ADVANCED PHYSICAL GEOGRAPHY CR: 3

Introduction to Physical Geography (concepts & basics). Study of Endogenic and Exogenic. Climatic Changes. Fluctuations of Sea-Levels. Landforms Development. Reflection of Climatic Characteristics on National Vegetation. Soil Types. Applications on Kuwait and the Regions attached.

## 1340-504: RESEARCH METHODS IN GEOGRAPHY CR: 3

Research Methods in Geography. Techniques of Analysis. Library Research Work. Map Analysis. Data Analysis techniques. Field – Investigations and Data Collections. Computer Analysis. Applications, Project Research Paper.

# 1340-505: URBAN AND REGIONAL PLANNING CR: 3

Planning Thoughts and Urban Development. Geography and Urban Planning. Types of Planning (Physical, Land-Use, Housing, Transportation, etc.). Theories of Urban Planning. Structure of City and Region. Regional Planning (Size, Time, Type). Master Plan and City Planning. Techniques (Computer, Mapping the City and Region). Application on Kuwait Master Plans 1950-2005.

# 1340-506: ADVANCED URBAN GEOGRAPHY CR: 3

Definitions of Urban Geography and Urbanization. Urbanization Aspects. Component of Ancient City (Egyptian, Greek, Romanian). Structure of Islamic City. Modern City Structures. Theories of City Structure. Urban Spatial Analysis. Urbanization in Arab World Urbanization in GCC Countries. Kuwait Urbanization (Before & after Oil era). Structure of Kuwait City and Master Plans.

# 1340-507: ADVANCED POPULATION GEOGRAPHY

**CR: 3** 

Definitions of Population Geography in relation to Demography. Factor Affecting Population Distribution. Census and Vital Statistics (sources). Interpreting Population Data. Aspects of Growth, Mortality, Natural increase, Immigration etc. Socio-economic Factors and labor. Population Policies (over pop. Under pop. optimum pop.). Statistical and Computer Analysis. Application on Kuwait Census (1957-2005), Migration, Growth and Future.

## 1340-508: DESERT GEOMORPHOLOGY CR: 3

Introduction and Basic Concepts. Factors Affecting Surface Forms in Arid Regions, Deserts and Geomorphology. Constructional and Ligneous Land forms. Weathering and Karst (wind affects). Fluvial Processes. Desert Land **Forms** Classification. Desert Geomorphology, and Geomorphology. Regions. **Plains** Coastal

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Geomorphology. Applications on Kuwait (field work, Lab work, and maps economic and military important.

## 1340-509: COASTAL GEOMORPHOLOGY CR: 3

Factors Affecting the Modification of Coast Lines (waves, tidal waves etc.) Change in Sea-Level. Classification of Coasts. Geomorphic Evolution and Coast Line. Major Coastal Systems and their Component Land Forms. Applications on Kuwait (field work and lab-work etc.).

#### GLOBAL ENVIRONMENT ISSUES 1340-510: CR: 3

Introduction and Basic concept. Present Day Climatic Changes. Air, Water, Soil pollutions. Ozone hole. Acid rainfall. Natural Disasters (Floods, Drought, Earth quikes etc.). Deforestation. Over Urbanization. Deceases (Global). Solutions.

#### 1340-511: REMOTE SENSING **CR: 3**

The primary objective of this course is to provide a solid foundation in the principles relating to remote assessment and sending quality statistical geometric evaluation, correction. image enhancement, and thematic information extraction. The student is assumed to finish an introductory course in remote sensing, and thus, expected to understand the basic principles of remote sensing, such as properties of electromagnetic spectrum, interaction between electromagnetic radiation and matter, and instrument characteristics of widely spread sensors (Land sat, MODIS, SPOT, etc). The laboratory portion of this course is designed to emphasize practical application in the mentioned topics. There will be five labs demonstrating the main topics of this course.

## 1340-513: ADVANCED GIS, PROJECT ON KUWAIT **CR: 3**

Introduction to Applied GIS. Kuwait Urban and human environments.

Data Collection. Data Analysis. Database Building. Landscape Ecology. GIS Project Planning.

### ADVANCED STUDIES IN 1340-514: POLITICAL GEOGRAPHY **CR: 3**

Introduction to Methods and Approaches in Modern Political Geography. The Geographical bases of National states. Changes and Patterns in the world Political map and the Contemporary

Geopolitical questions. Study of state, Evolution, Geostrategic issues, State power. Boundary disputes and Geographic expression of power. Election Geography and New aspects. Application on Kuwait.

### 1340-515: **ECONOMIC GEOGRAPHY &** DEVELOPMENT

CR: 3

Concept of Economic Geography. Theories of Economic Development. Classification of Regional Economic Activities. Economics. Geography Development and Barriers. Economic Development. Populations, Urbanization and cities and development. Application (on Kuwait, GCC Countries).

### GEOGRAPHIC INFORMATION 1340-516: **SYSTEMS**

**CR: 3** 

The course presents different topics in GIS adequate of graduate students. The course focuses on advanced theories and techniques for handing geographic information systems, including spatial data structures, interpolation techniques, terrain analysis, cost surfaces and database management techniques, This course designed for students who already have an introductory understanding of GIS. Emphasis will be placed on the application of spatial analytical techniques to geographical problem-solving.

### SPECIAL TOPICS 1340-580: **CR: 3**

This course is a special one it represents a research project based on previous topics and courses. It is designed primarily by the supervisor with accordance to student interests. Number of problems and geographical aspects are discussed in physical and humans contexts. Some topics have special interest (i.e. pollution, traffic jam, housing, sea-level, oil industry, climatic changes industry, over population and over urbanization).

### 1340-593: CAPSTONE PROJECT **CR: 3**

The student undertakes an independent project on a research topic of theoretical and/or experimental focus under the supervision of a faculty member listed in the supervisory list of the College of Graduate Studies. The objective is to provide the student with an opportunity to integrate and apply the knowledge gained throughout the course of study in a practical problem. The student must

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document the project in a scientific report following standard research writing guidelines and give a public presentation to the project examination committee.

1340-597: THESIS

CR: 0

1340-598: THESIS

CR: 0

2000-599: THESIS

CR: 9