

**MASTER OF SOCIAL SCIENCES  
GEOGRAPHY  
Program code: 1340**

**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**

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

**18(18) Electives (3 Credits each)**

- 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

- 1340-514 Advanced Studies in Political Geography  
 1340-515 Economic Geography and Development (for thesis option)  
 1340-580 Special Topics

**9 COMPULSORY**

- 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.

**1340-505: 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

**1340-502: 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.

**1340-506: 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.

**1340-504: 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.

**1340-507: 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 Regions. Plains Geomorphology. Coastal 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.).

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

Introduction and Basic concept. Present Day Climatic Changes. Air, Water, Soil pollutions. Ozone hole. Acid rainfall. Natural Disasters (Floods, Drought, Earth quakes 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 sensing quality assessment and statistical evaluation, geometric 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.

**1340-514: ADVANCED STUDIES IN 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 Economics. Economic Activities. Growth Development and Barriers. Geography of Economic Development. Populations, Urbanization and cities and development. Application (on Kuwait, GCC Countries).

**1340-516: GEOGRAPHIC INFORMATION SYSTEMS**  
**CR: 3**

The course presents different topics in GIS adequate of graduate students. The course focuses on advanced theories and techniques for handling 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.

**1340-580: SPECIAL TOPICS**  
**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****1340-597: THESIS**  
**CR: 0****1340-598: THESIS**  
**CR: 0****2000-599: THESIS**  
**CR: 9**