

Course Title: GIS for Area Studies
Course No: SA 662
Total Credits: Three (3)
Course Teacher: Dr. Ambrish Dhaka

INTRODUCTION

Geospatial information has been one of the important forces formulating the discourse of power and identity of state. Geographical Information System (GIS) is increasingly recognized as methodological and cognitive approach for calibrating the state power in time-space coordinates. The scale and direction of many anthropogenic events can be mapped and varying degrees of causality among factors can be established through spatial analysis. Nowadays, GIS plays a very significant role in deciphering the critical discourse on geo-power. Students would benefit from the demonstration of GIS software-ILWIS, ESRI, and Open GIS products, Lab exposure and basic spatial techniques through practical exercises.

INSTRUCTION METHOD: Lectures, Web-Digital content, Seminars/Tutorials

EVALUATION PATTERN: Sessional Work and Semester Examination

COURSE CONTENTS

1. Space time relevance in area studies, Maps as Critical discourse of geo-power – boundaries, territoriality and spatial constructivism.
2. GIS- definition and its meaning. Understanding the Information Technology (IT) interface of GIS – spatial resolution, coordinates, Datum line, Grid, Projection systems – only introductory level.
3. Remote Sensing as Source of Information - Imagery and Data Classification & Database- concepts and meaning.
4. Application for Area Studies – Mapping the study area, settlements, regions. Cartograms - plotting the variables and spatial analysis.
5. GIS and Geo-power – Information and its projection as source of power, role of real time GIS in spatial intelligence, anthropomorphic geo-informatics – human terrain analysis.
6. GIS and Geoeconomics – Resource appraisal in GIS, strategic significance assessment, network analysis, isometric analysis.

SELECTED READINGS

Barber, P. and T. Harper. *Magnificent Maps: Power, Propaganda and Art*, The British Library: London, 2010.

Chrisman, NR. *Exploring Geographic Information Systems*, Wiley: New York, 1994.

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Haenn, N and R Wilk. *The Environment in Anthropology*, NYUP: New York, 2006.

Hagget, P (ed.) *Models in Geography*, Methuen: London, 1967.

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Hubbard, P (et. al). *Key Thinkers on Space and Place*, Sage: London, 2005.

Iiffe, JC. *Datums and Map Projections*, Whittles: New York, 2003.

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Lefebvre, H. *State, Space, World*, UMP: Minneapolis, 2009.

Legrenzi, M and B Momani. *Shifting Geo-economic power of the Gulf*, Ashgate: Surrey, 2011.

Netler, M and H. Mitasova. *Open Source GIS*, Kluwer: New York, 2005.

Pang Lo, C, AKW Yeung, *Concepts and techniques of Geographic Information Systems*, Prentice Hall: London, 2002.

Peterson, GN. *GIS Cartography*, T&F: Ebook, 2009.

Pettit, C (et. al). *Landscape Analysis and Visualisation*, Springer: Heidelberg, 2008.

Reddy, MA. *Textbook of RS and GIS*, BSP: Hyderabad, 2008.

Thrower, NJW. *Maps & Civilisation*, UCP: Chicago, 2008.

Tuan, Yi-Fu. *Space & Place- The Perspective of Experience*, UMP: Minneapolis, 2001.

Tuathail, GO and Simon Dalby. *Rethinking Geopolitics*, Routledge: London, 1998.

Wood, D. *The Power of Maps*, Guilford Press: New York, 1992.

Zhou, Q. (et. al). *Advances in Digital Terrain Analysis*, Springer: Heidelberg, 2008.