GEOG1005 Map Use, Reading, and Interpretation (6 credits)

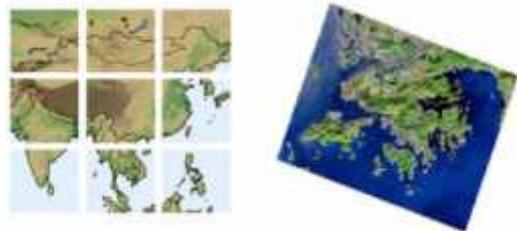*Course Teacher: Professor P C Lai*

Objectives

A major objective of the course is to provide students with a factual basis for making intelligent decisions concerning the use and interpretation of maps. A secondary objective is to stimulate interest in cartographic issues that play a vital role in modern development, such as Geographic Information Systems, and to enhance computer literacy. It is important that Geography students understand the principles of map design and how to analyze map products.

Course Synopsis

Maps have been used for centuries to describe spatial patterns and portray association and correlation. Recent developments in digital spatial data handling have changed the environment where maps are used. Maps are no longer confined to the printed format. The objective of this course is to provide an integrated discussion of standard planimetric maps, their uses, and the basic skills necessary to take full advantage of these maps. The lectures will cover fundamental concepts underlying different mapping/analytical techniques, their strengths, limitations, and application settings. The practicals will be devoted to imparting essential computer operating skills to visualize spatial data.

Lecture Topics
- Introduction to maps
- Cartographic representation and map projections
- Map reading and design
- Map interpretation
- Beyond map symbols

Practicals

Five computer-based practical exercises.

Assessment

Examination (1&1/2 hours) 40%; Coursework 60% (consists of five practical exercises).

Learning Outcomes

Knowledge:
- Principles of map making
- Map design considerations

Skills:
- Map reading and interpretation skills
- Word processing, IT, graphics, and design skills

Recommended Reading List
1. Campbell, J. (2001). *Map Use & Analysis*. Boston: McGraw-Hill.
2. Dodge, M. Kitchin, R., Perkins, C. Eds. (2011). *The Map Reader: Theories of Mapping Practice and Cartographic Representation*. Hoboken, NJ: Wiley. [Electronic Resource] Chapters 1.2, 1.6, 2.7, 3.4*, 3.6, 3.7, 3.8* (* indicates most relevant)
3. Muehrcke, P.C., Muehrcke, J.O., Kimerling A.J. (2001). *Map Use – Reading, Analysis, and interpretation*. Rev. 4th edition. Madison, Wisconsin: JP Publications.