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## **CARTOGRAPHY I**

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### **Course Outline**

#### **Prerequisites**

GEOG 100 or 221 or 241, and GEOG 111.

#### **Course Description**

This course focuses on the basic principles of cartography as the art, science and technology that deals with the conceptualization, production, analysis, dissemination and study of maps. The class will be a combination of lectures, discussions and computer labs on topics such as:

- An overview of cartography (*history, current status, definitions*)
- Basic mapping principles (*scale, projections, spatial reference systems*)
- Elements of map design and layout (*map types, lettering*)
- Cartographic analysis (*data sources, cartographic reasoning, thematic analysis*)
- Map abstraction (*classification, simplification, exaggeration, symbolization, generalization*)
- Cartographic communication (*visualization, map production process*)
- The impact of new technologies on cartography (*GIS, RS, Internet*)
- Cartography and society (*how to lie with maps, truths about maps, cartographic ethics*)

#### **Assignments**

Assignments and final project will be computer-based using cartographic software and are designed to complement and reinforce theoretical concepts. This will prepare students for further advanced study in digital cartography and its applications in geography.

#### **Grading**

The final grade for the course will be determined from: laboratory assignments (20%), final project (15%), pop quizzes (15%) and final exam (50%).

#### **Textbooks**

- Robinson, Arthur H., Joel L. Morrison, Phillip C. Muehrcke, A. Jon Kimerling, and Stephen C. Guptill, 1995. *Elements of Cartography*. 6<sup>th</sup> ed., NY: John Wiley & Sons Inc.
- Kraak, Menno-Jan, and Ormeling, Ferjan 1996. *Cartography: Visualization of Spatial Data*. Harlow, England: Longman.
- MacEachren, Alan, 1995. *How Maps Work*. NY: The Guilford Press.

**Note:** The course may be applied towards the Certificate in Liberal Arts.

**The course starts on January 8<sup>th</sup> 2003, and labs WILL begin in that week.**

The content of this course is subject to minor changes depending on the amount of students and available resources