

Geography 476
Advanced Cartography

MW 1:30-3:20; Lab Time Friday 1:30-3:20

Spring Semester 1995
Dr. Michael P. Peterson

*My office is in PSB 312c, accessible through PSB 312. My office hours are Monday thru Thursday from 8:15-9:30 AM. I will also be available after class. My telephone number is 956-3526 or you can leave a message with the departmental secretary at 956-8465. My home phone number is 957-3057. My e-mail address is mpetersn@uhunix.uhcc.Hawaii.Edu. **If you have any questions about the course or an individual assignment, please contact me.***

Course Description

Advanced cartography will examine the concepts of map interaction and animation. The course will view the computer as a medium of communication in cartography rather than simply a tool for the creation of maps on paper. The mental cognitive aspects of map reading and interpretation will be discussed. Programs for computer mapping, map design, image processing, multimedia, hypermedia, and computer animation will be reviewed and scripting languages introduced. Exercises will be used to reinforce the major concepts. The final project will consist of a multimedia production or a cartographic animation.

Textbooks and Materials

(1) Peterson, Michael P. (1995). **Interactive and Animated Cartography.**

Copies of this book are available from the Copy Connection at 1019 University Ave. in the Puck's Alley Courtyard. *Ask for the textbook for GEOG 761.* The store is behind Mama Mia's. Call before you go to the store to make sure they have a copy printed. Their telephone number is 949-4516.

(2) 3.5" DS/HD diskettes. You will need more than one. I strongly encourage that you back-up your files on a second disk.

Class Conduct

Class time will be divided between lecture, seminar-type discussions, and the introduction of assignments. The type of class for each class period is designated on the schedule. An attempt will be made to cover a great deal of material on 'lecture' days. A seminar class is designed for class discussion. Please read the materials assigned for these days. **STUDENT PARTICIPATION IS EXPECTED.** On days designated with 'Assignment,' an assignment will be introduced and explained and some of the class time will be spent in the computer room. (

Exercises and Assignments

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| 1. Surface III (contour and three-dimensional mapping) | 5. Multimedia (HyperCard) |
| 2. Choropleth mapping/Map Projections. | 6. Animation |
| 3. Graphic Processing (Illustrator or Freehand) | 7. 3-D animation |
| 4. Image Processing (PhotoShop) | 8. Interactive animation. |

Assignments are due within two weeks from the date that they are assigned.

Final Project

The topic of your final project is your choice. I encourage you to pursue some type of cartographically-oriented multimedia production or a stand-alone cartographic animation. In your write-up, you should provide a summary of your project including your purpose, the methods that you used, and an evaluation of the effectiveness of the overall presentation. I will set up meeting times with you during March to discuss your project.

Date	Topic	Class Type	Readings
Jan. 11	Introduction	Orientation	
Jan. 18	Computer Mapping	Lecture	Foreword, Preface, Chap. 4
Jan. 23	Surface III	Assignment	
Jan. 25	Computer Mapping	Lecture	Foreword, Preface, Chap. 4
Jan. 30	Choropleth/Map Projection	Assignment	
Feb. 1	Illustrator/Freehand Demonstration	Assignment	Chapter 5
Feb. 6	Graphic Processing	Lecture	Chapter 5
Feb. 8	Image Processing	Lecture	Chapter 6
Feb. 13	PhotoShop	Assignment	Chapter 6
Feb. 15	Maps and the Changing Medium	Seminar	Chapter 1
Feb. 22	Cartographic Communication	Seminar	Chapters 2
Feb. 27	Cartographic Communication	Seminar	Chapters 2
Mar. 1	Interactive and Animated Maps	Seminar	Chapter 3
Mar. 6	Review	Seminar	Chapters 1 thru 6
Mar. 8	Exam 1		
Mar. 13	Multimedia & Hypermedia	Lecture	Chapter 7
Mar. 15	HyperCard	Assignment	
Mar. 18	Computer Animation	Lecture	Chapter 8
Mar. 20	HyperCard Animation	Assignment	
Mar. 22	Final Project Discussion	Seminar	
Apr. 3	See me during this week about your final project		
Apr. 3	Scripting and Programming	Lecture	Chapter 9
Apr. 5	HyperCard or Director	Assignment	
Apr. 10	The Interactive Map	Seminar	Chapter 10
Apr. 12	The Animated Map	Seminar	Chapter 11
Apr. 17	3- D Animation (Infini-D)		
Apr. 19	Final Project		
Apr. 24	Final Project		
Apr. 26	Frontier	Seminar	Chapter 12
May 1	Internet	Seminar	Appendix B
May 3	Final Project Presentations	Seminar	

Final: May 12 (Fri.); 2:15-4:15 pm

Grading: The final grade will be based on the successful completion of the assignments (30%), two exams (30%), final project (30%), and class discussion (10%).