## Geography 594 Graduate Transport Methods

Fall 2012

Instructor: Dr. Paul Marr

Phone: 477-1656 Office: Shearer Hall 110 Email: pgmarr@ship.edu

Webpage: http://webspace.ship.edu/pgmarr/

## **Objectives**

This special topics course is designed to introduce students to both basic and advanced transport analyses through the completion of a transport analysis project. Over the course of the semester students will learn to use the techniques listed below:

- 1. Basic node and network descriptive techniques.
- 2. Basic network measurements.
- 3. Basic and advanced matrix analyses.
- 4. Location analyses.
- 5. Research project design.

Since this is a seminar style course, there is no set schedule of the material covered outside of the first few weeks of class. After that, each week's activities will be determined by the at which the previous tasks have been completed. It is very important to attend each class. Each student will be responsible for a part of the overall project and failure to complete a task will hold up the entire project. Students will be responsible for reading through any assigned material PRIOR to class.

## Grading

Each component of the semester project will be graded individually and final grades will be assigned based on the average of the component, exercise, preparedness, etc grades.

In addition to the class project, there will also be a series of exercises to help you become familiar with the techniques being covered. These exercises will be handed out AND due by the end of the class unless otherwise noted.

## Schedule:

Week 1: Introduction, Atacama Desert

Week 2: Dry Puna, Chile-Bolivia Transport, (Brush 1982)

Week 3: Network Measurements, Lab 1 (Baeid and Wheeler 1993)

Week 4: Connectivity, Lab 2, (Gauthier 1968)

Week 5: Shimbel Distance, Lab 3, Reading (Ivy 1995)

Week 6: Valued Graphs, Lab 4.

Week 7: Scalar Graphs, Lab 5.

Week 8-14: Class Project, Weekly Reading Assignments (See schedule)

All readings are stored at S:\GEO\Marr\Transport Methods\Readings\