

**Master Syllabus**  
***Department of Geography***

**GEOG 615: Research Methods in Geography**

**Course Description**

A required course for graduate students in Geography Department to help them design their thesis research and write thesis proposal. Topics might include research design, sampling, data analysis, data display, validation, and geographic information techniques in scientific research in Geography. In addition, this course will also discuss some special topics such as professional presentation, plagiarism etc. in scientific research. (3 credit hours).

Prerequisite: GEOG 250 or instructor permission

**Course Objectives**

The goal of the course is to introduce graduate students methods in geographic research. The specific objectives of the course are to (1) provide students opportunities to become familiar with the scientific research processes in Geography, (2) promote students critical thinking via readings, discussions, and writing, and (3) learn to write thesis proposal and thesis.

**Course Rationale**

This course is an essential component of any geography graduate student's core curriculum in that it introduces the fundamental research methods and skills utilized in geographic research for both human and physical geography. This is of particular important since all geography graduate students are required to complete an approved research thesis in order to meet their degree requirements.

**Course Content and Format**

Students will be presented material in a lecture style format that will include multimedia presentations and case study discussions. The following shows an example of a potential outline of topics for this course, with time allotment for each topic at the discretion of the instructor:

Topic I	Data Collection in Geography
Topic II	Physical Measurements, Behavioral Observations
Topic III	Survey and Interview
Topic IV	Data Sampling Design

Topic V	Statistical Analysis and Data Display
Topic VI	Geographic Information Techniques in Research
Topic VII	Scientific Communication in Geography
Topic VIII	Structure of thesis proposal
Topic IX	Online databases
Topic X	Professional PowerPoint presentation
Topic XI	References or Bibliography
Topic XII	Understanding and preventing plagiarism

### **Textbook Suggestions**

Daniel R. Montello and Paul C. Sutton, 2006. *An Introduction to Scientific Research Methods in Geography*. SAGE Publications. ISBN: 1-4129-0287-8.

### **Methods for Evaluating Student Performance:**

Forms of evaluation might include writing assignments, examinations, presentations, and a final project.

### **Evaluation of the Course**

Students use university (and departmental) online course evaluation forms to evaluate this course.