Department of Geography Master of Science in Geography Plan for Assessment of Student Learning Outcomes The University of New Mexico

A. College, Department and Date

1. College:	College of Arts & Sciences
2. Department:	Department of Geography
3. Date:	May 10, 2008

B. <u>Academic Program of Study</u> *M.S. Geography*

C. <u>Contact Person for the Assessment Plan</u> Maria Lane, Assistant Professor, mdlane@unm.edu

D. Broad Program Goals & Measurable Student Learning Outcomes

1. Broad Program Learning Goals for this Degree Program

- A. Students will learn to conduct legitimate and original research on geographical topics.
- B. Students will develop an ability to communicate clearly and effectively.
- C. Students will prepare themselves for professional careers in Geography.

2. List of Student Learning Outcomes (SLOs) for this Degree Program

- A.1. Students will be able to state an original research question appropriate for geographic analysis.
- A.2. Students will be able to state how a research project contributes to an existing body of geographic literature.
- A.3. Students will be able to design legitimate geographic methodology.
- A.4. Students will be able to implement legitimate geographic methodology.
- A.5. Students will be able to explain and assess the results of original geographic research.
- B.1. Students will be able to communicate clearly and effectively in a written format.
- B.2. Students will be able to communicate clearly and effectively in an oral format.
- C.1. Students will be able to enter professional positions or Ph.D. programs related to geography or environmental management.

E. Assessment of Student Learning Three-Year Plan

1. Priority Student Learning Outcomes

Over the next three years (2008-2011), the Department of Geography will assess all of the learning outcomes listed above. These program outcomes are responsive to UNM's broad student learning goals, as shown in the following table.

University of New Mexico Student Learning Goals					
Program SLOs	Knowledge	Skills	Responsibility	Program SLO is conceptually different from university goals.	
A.1. Students will be able to state an original research question appropriate for geographic analysis.	Х	X			
A.2. Students will be able to state how a research project contributes to an existing body of geographic literature.	Х	Х			
A.3. Students will be able to design legitimate geographic methodology.	Х	Х	Х		
A.4. Students will be able to implement legitimate geographic methodology.		X	X		
A.5. Students will be able to explain and assess the results of original geographic research.		Х	х		
B.1. Students will be able to communicate clearly and effectively in an oral format.		Х	Х		
B.2. Students will be able to communicate clearly and effectively in a written format.		Х	Х		
C.1. Students will be able to enter professional positions related to geography or environmental management.		Х	Х		

2. How will learning outcomes be assessed?

Learning outcomes under goals A and B will be assessed using each M.S. student's final professional product as evidence of learning. Since students are allowed to choose either a thesis option (Plan I) or a non-thesis option (Plan II) to meet their graduate requirements, these products will be slightly different. The outcome related to goal C will be assessed via indirect evidence of professional placement. Specific methods and plans for assessment are described fully on the following pages.

Note: Program Assessment for the M.S. in Geography will include evidence from <u>all</u> students who graduate from the program during each three-year assessment cycle.

2. How will learning outcomes be assessed? (continued)

MEASUREMENT PROCESS #1

Outcomes:

- A.1. Students will be able to state an original research question appropriate for geographic analysis.
- A.2. Students will be able to state how a research project contributes to an existing body of geographic literature.

Measurement Process:

i. Assessment of these outcomes will use the student's final professional product as evidence of student learning, as follows:

Plan I students: written thesis and oral thesis defense

Plan II students: research proposal generated in the required class GEOG 501

- ii. This is a direct measurement.
- iii. The program performance target for these outcomes is defined as "acceptable" or better performance by 100% of graduating students. The standards for "acceptable" are defined in the attached Rubric A, which breaks each outcome into multiple components.

MEASUREMENT PROCESS #2

Outcomes:

- A.3. Students will be able to design legitimate geographic methodology.
- A.4. Students will be able to implement legitimate geographic methodology.
- A.5. Students will be able to explain and assess the results of original geographic research.

Measurement Process:

- i. Assessment of these outcomes will use the student's final professional product as evidence of student learning, as follows:
 - Plan I students: written thesis and oral thesis defense

Plan II students: written answer and oral defense of field problem assignment

- ii. This is a direct measurement.
- iii. The program performance target for these outcomes is defined as "acceptable" or better performance by 100% of graduating students. The standards for "acceptable" are defined in the attached Rubric A, which breaks the outcome into multiple components.

MEASUREMENT PROCESS #3

Outcome:

B.1. Students will be able to communicate clearly and effectively in an oral format.

Measurement Process:

i. Assessment of this outcome will use the student's final professional product as evidence of student learning, as follows:

Plan I students: oral thesis defense

Plan II students: oral defense of field problem assignment

- ii. This is a direct measurement.
- iii. The program performance target for this outcome is defined as "acceptable" or better performance by 100% of graduating students. The standard for "acceptable" is defined in the attached Rubric B, which breaks the outcome into multiple components.

2. How will learning outcomes be assessed? (continued)

MEASUREMENT PROCESS #4

Outcome:

B.2. Students will be able to communicate clearly and effectively in a written format.

Measurement Process:

i. Assessment of this outcome will use the student's final professional product as evidence of student learning, as follows:

<u>Plan I students</u>: written thesis

Plan II students: written answer to field problem assignment

- ii. This is a direct measurement.
- iii. The program performance target for this outcome is defined as "acceptable" or better performance by 100% of graduating students. The standard for "acceptable" is defined in the attached Rubric B, which breaks the outcome into multiple components.

MEASUREMENT PROCESS #5

Outcome:

C.1. Students will be able to enter professional positions or Ph.D. programs related to geography or environmental management.

Measurement Process:

- i. Assessment of this outcome will use self-reported evidence of job placement after graduation. This will be collected by each student's major faculty advisor and will be compiled by the Department on an annual basis.
- ii. This is an indirect measurement.
- iii. The program performance target for this outcome is that 75% of our former graduate students will hold a professional position or will be enrolled in a Ph.D. program related to geography or environmental management within two years of graduation.

3. When will learning outcomes be assessed? When and in what forum will the results of the assessment be discussed?

- In general, assessment will be conducted on a rolling basis. Each time a student writes and orally defends a thesis or field problem, three Geography faculty members will independently measure the student's mastery of outcomes using Rubrics A and B.
- Note: For Plan II students, two of the outcomes (A.1 and A.2) will be assessed using evidence from the written research proposal submitted in the required class GEOG 502. After the conclusion of this class each spring, the instructor will file all students' proposals so that they can be retrieved at the time of each Plan II student's field problem defense. At that time, the committee will take the additional step of reviewing the GEOG 502 proposal for purposes of assessment, using Rubric A.
- Completed rubrics A and B will be placed in an assessment file (to be administered by the departmental Assessment Coordinator) as soon as they are completed. Each summer, the Assessment Coordinator will produce an annual report on the number of students assessed and the average scores recorded for each outcome. This report will be distributed to the entire faculty and to the Advisory Board. This report will also include a synopsis of self-reported professional placement, as gathered by faculty members and compiled by the Department Administrator.

3. When will learning outcomes be assessed? (continued)

Modifications to the assessment instruments/methods will be discussed each year at the annual faculty retreat. Changes in program curriculum/pedagogy will be discussed every third year, beginning in summer 2010. (See next section for details regarding this process.)

TIMELINE

- Summer 2008
 - o appointment of Assessment Coordinator
 - o assignment of assessment duties for 2008-209

• Fall 2008 - Spring 2009

o rolling assessment of final professional products

• Summer 2009

- annual report compiled/distributed
- o faculty review of assessment procedures
- o assignment of assessment duties for 2009-2010

• Fall 2009 - Spring 2010

o rolling assessment of final professional products

• Summer 2010

- o annual report compiled/distributed
- o faculty review of assessment procedures
- o faculty review of M.S. program
- o assignment of assessment duties for 2010-2011

• Fall 2010 - Spring 2011

o rolling assessment of final professional products

• Summer 2011

- o annual report compiled/distributed
- o faculty review of assessment procedures
- o assignment of assessment duties for 2011-2012

4. What is the unit's process to analyze/interpret assessment data and use results to improve student learning?

All members of the Geography faculty will participate in the assessment process at various levels, as described below.

a) Evidence will be gathered by the major faculty advisor for each graduating student, either in the collection of the written thesis/field problem, the convening of an oral defense of thesis/field problem, or the collection of self-reported professional placement data.

4. What is the unit's process to analyze/interpret assessment data and use results to improve student learning? (continued)

- b) Analysis of direct measures A.1-A.5 and B.1-B.2 will be conducted by three members of the Geography faculty for each student, typically the three members of the student's graduate committee. (If, however, the committee is not made up entirely of Geography faculty members, additional Geography faculty member(s) will be recruited to read the thesis or field problem and attend the oral defense for purposes of assessment.)
- c) Analysis of the indirect measure C.1 will be conducted by a member of the faculty, who will be assigned to compile and statistically analyze the data collected by each faculty member about his or her students' professional placement.
- d) Annual reports will be prepared by the Assessment Coordinator and circulated to the full faculty and the advisory board.
- e) Given the small size of the Geography faculty, interpretation of all measurements will be conducted by the faculty as a whole. Annual reports will be used as a basis for discussing assessment mechanisms/procedures (on an annual basis) as well as curricular design and pedagogical approaches (every third year). Priority areas for discussion at the annual faculty retreat will include:

2009, 2010, 2011

- Quality of data collected
- Completeness of data collected
- Reliability of data collected
- Potential improvements to measurement instruments
- Potential improvements to assessment procedures
- Assignment of assessment responsibilities for the coming year

2010

- Student performance levels on each outcome
- Potential explanations for any missed targets
- Desired improvements to student learning
- Curricular approaches to improving student learning
- Pedagogical approaches to improving student learning
- Modifications to program goals and outcomes
- Modifications to performance targets
- f) Recommendations will be voted on by the entire faculty and will be circulated annually to the advisory board, the Dean of Arts and Sciences, and the Provost's Office of Assessment.