

Minutes of Assessment Meeting of Geography faculty held on September 6, 2012, 2:00-4:00 pm.

In attendance: Jason Biller, Daniel Block, Kari Burnett, Janet Halpin, Arthur Redman (Dept. Chair), Gebeyehu Mulugeta (Assessment Coordinator, Geog Undergraduate and Graduate Programs)

The meeting was called to order at 2 pm.

1. Geography Undergraduate Program Assessment, AY2011/2012:

Student Self-Assessment survey (indirect assessment of learning) and *Geography Proficiency Test I and Geography Proficiency Test II* (both direct assessment instruments of student learning) were administered.

a. Assessment results:

- *Student Self-Assessment* survey: Student responses to survey questions indicated that (i) they were making satisfactory progress toward completing their studies, (ii) they had a much better understanding of the world around them and the environment than a year ago, (iii) they were better researchers and writers, more computer/ internet-literate, and more confident and assertive than a year ago, and (iv) they could relate topics in geography to issues in their communities. Students didn't identify any area that needed improvement.
- *Geography Proficiency Test I* : One geography major and four geography minors took the test. The test assesses geographic skills and concepts students are expected to learn and critical thinking skills they are expected to develop upon completion of 2000-level courses in their major. The one geography major who took the test scored 47%, much lower than 70%, the threshold set for a satisfactory performance. Among the four geography minors who took the test, one student scored 79% (higher than the threshold set for a satisfactory performance), three scored in the 53-58 range, and one student scored 37%. While the test scores suggested improvements of student learning were needed in all areas of geography (physical geography, human geography, and the technique areas), the question-by-question analysis of the test results indicated specific topic areas of student strengths and weaknesses. As in the past, students had more difficulties with questions relating to concepts in physical geography and the technique areas.
- *Geography Proficiency Test II*: Four geography minors took the test. The test assesses geographic skills and concepts students are expected to learn and grasp and critical thinking skills they are expected to develop upon completion of most 3000-level and some 4000-level courses in their major. The scores achieved by students (57%, 57%, 48%, 46%) were lower than $\geq 70\%$, threshold set for satisfactory performance for the majors.

b. Decisions based on assessment findings:

- Kari Burnett and Janet Halpin would modify Questions 4 and 12 in *Geography Proficiency Test I*, and Jason Biller would add a diagram to Question 6 in *Geography Proficiency Test II*.
- Instructors agreed to give special emphasis to concepts in physical geography and the technique areas in all courses they teach.

- To attract quality students and increase enrollment in the undergraduate geography program, faculty agreed to meet every two weeks starting on September 20, 2012, to consider different areas of focus (GIS, Environmental Studies, Urban Studies, Environmental Justice) for the major and develop a recruitment plan.

2. Community Development Graduate Certificate Program Assessment, AY2011/2012:

Student Self-Assessment survey (indirect assessment of learning) and *Program Assessment* and *Capstone Project* (both direct assessment instruments of student learning) were administered.

a. Assessment results:

- *Student Self-Assessment* survey: Student responses to survey questions indicated that, compared to a year ago, (i) they were more proficient in GIS and could apply the technologies to actual real-life situations and community analysis, (ii) they had learned they could do a lot to help their communities, (iii) they had more desire to be more involved in their communities, (iv) they had more hunger for knowledge, and (v) that they were more self-motivated.
- *Program assessment*: The test was administered to eleven students of GEOG 5530, Neighborhood Development, in the spring 2012 as part of the final exam for the course. One student received a C and the remaining students receive Bs & As.
- *Capstone Project*: One student completed a capstone project for the Community Development Certificate Program. Overall, the student received a B in her project. The project was well conceived and data collection for it was well carried out. However, the final project lacked depth of analysis and would need some improvements to be delivered to a potential client.

b. Decisions based on assessment findings:

- A decision was made that the Community Development capstone course needs to be restructured, with somewhat less focus on general readings about current issues in community development and somewhat more focus on the capstone project itself. The restructuring would take place during the 2012/2013 academic year.

3. GIS Graduate Certificate Program Assessment, AY2011/2012:

Student Self-Assessment survey (indirect assessment of learning) and *Pretest/Posttest* and *Capstone Project* (both direct assessment instruments of student learning) were administered.

a. Assessment results:

- *Student Self-Assessment* survey: In response to questions in the survey students could list a wide range of GIS skills that they learned in the past year and indicated that they could use GIS more proficiently now than a year ago and that they could teach other people what they learned in the past year.
- *Pretest/Post-test*: Five students in Geog 5830 took the Scores for the **pretest** ranged from 33% to 55% and the average score was 43%. As in the past, the pretest revealed that (a) students had some understanding of the geographic coordinate system, but could not provide clear definitions of *latitude*, *parallel of latitude*, *longitude*, *meridian*, and *graticule*, (b) students appeared to have some

understanding of map projections in general, but they could not define the major categories of map projections and could not provide specific examples of the different types map projections, (c) students had problems with such basic concepts as *standard line (on map projection)*, *map scale*, *scale factor (on map projection)*, *datum planes (NAD27& NAD83)*, and (d) students had serious problems with scale computations, the conversion of degrees, minutes, and seconds to decimal degrees, and the conversion of decimal degrees to degrees, minutes, and seconds. As expected, scores for the post-test were significantly better than scores for the pretest, and the **post-test** results indicated significant learning during the course of the semester. Scores for the **post-test** ranged from 69% to 98% .

- **Capstone Project:** During the 2011/2012 academic year, **five** students completed the capstone project. The quality of projects completed by GIS Certificate students have been improving over the years as a result of improving student learning based on assessment results.

b. Decisions based on assessment findings:

- Jason Biller and Gebeyehu Mulugeta would give special emphasis to concepts with which students continue to have problems in Geog 5800 & 5830 respectively. The **projects** completed were of excellent quality and students were encouraged to present them at the ILGISA (Illinois GIS Association) Fall 2012 Conference which will take place in Lisle, Illinois.

4. Geography MA Programs Assessment, AY2011/2012:

During the 2011-2012 academic year, a total of 5 students completed their studies in the three MA options. *Student Self-Assessment* survey (indirect assessment of learning), *Geog 5860 (Geographic Inquiry)*, *referred seminar/master's papers* and *comprehensive exams* (for MA without thesis option students), *pretest/posttest* (for MA in Geography with GIS Concentration students), and *thesis* (for the MA in Geography with thesis option students and for MA in Geography with GIS Concentration students) were the instruments of assessment.

a. Assessment results:

- **Student Self-Assessment** survey: MA students without and with the thesis option indicated that they are better researchers, can speak more eloquently about environmental justice, globalization, and social justice, can manage their time better, and are more confident about themselves than a year ago. GIS students listed a wide range of GIS skills that they learned in the past year they could, students think they can use GIS more proficiently now than a year ago, and that they could apply to problems in the real world.
- **Referred seminar/master's papers** and **comprehensive exams** (for MA without thesis option students): Student strengths reported include fairly good to strong writing skills, fairly good to excellent oral communication, good analytical capabilities, and enthusiasm for the subject. Student weaknesses reported include not digging deeper into the literature, difficulty articulating research questions, and time management problem, and difficulty completing activities by due dates. The non-thesis option is currently being phased out; all new students admitted into the MA program will be required to write a thesis.
- **Thesis** (for the MA in Geography with thesis option students): While the writing quality of the two thesis varied, both were very well written. Overall, the biggest problem the thesis students encountered was completing their theses in a reasonable period of time.
- **Pretest/Post-test and thesis** (for MA in Geography with GIS Concentration student): The student took the pretest/post-test in a previous semester and performed exceptionally well;

she scored 72% and 96% in the pretest and post-test respectively; $\geq 80\%$ in the post-test is considered a satisfactory level of performance. In her thesis, the student performed a high level analysis using remotely sensed satellite data.

b. Decisions based on assessment findings:

- Student weaknesses in research skills and the issue of students not being able to finish their thesis in a reasonable amount of time has been addressed by the addition of a required course, Geog 5860 (Geographic Inquiry) to the curriculum. This class would help students develop a thesis proposal. Students who completed their thesis this year predated the Geographic Inquiry requirement. It remains to be seen as to whether students who took the course complete more quickly. In addition, there has been a renewed advising focus on thesis completion. The department has also made the thesis option compulsory for all MA students whose programs began in fall 2011 or later. This places additional focus on writing skills as well as the ability to complete a large project. It is hoped that the Geographic Inquiry class will help with this, in addition to the now required Thesis I and Thesis II classes for all MA students.

**The meeting was adjourned at 3:55 pm
GM/09/06/2012**