

**Trend Data for Assessment Findings, GIS Certificate Program  
Spring 2012**

**Program/Department** Graduate Certificate in GIS/GSHAA      **Assessment Coordinator** Gebeyehu Mulugeta

| Instrument                                      | 2009/2010 Results   | Actions Taken   | 2010/2011 Results  | Actions Taken  | 2011/2012 Results  | Actions Taken   | Summary   |
|---|---|---|--|--|--|---|---|
| Student-self Assessment; Intern-Employer Survey | Student self-assessment: Overall, student responses indicate satisfaction with program  | Responses to some questions suggest we should do better; those responses will be discussed  | Intern-employer survey: Report submitted by student intern demonstrated student gained very valuable work and GIS experience; internship supervisor at EPA rated both professional behavior and problem solving ability of intern at 5 on a scale of 5 (Excellent) to 1 (Unsatisfactory), and indicated that intern was prepared enough for entry-level GIS position in their organization.                                  | None   | Student self-assessment results indicated satisfaction with program; students listed several skills and concepts they learned in the past year; they also listed several skills and concepts that they could explain to other students. Employers have indicated that GIS graduates need computer programming skills | None.   | Both student self-assessment results and intern-employer survey results indicate satisfaction with the quality of the program. Faculty is continuing their efforts to keep up with the rapidly changing technology of GIS and to improve the quality of the program; the new programming course, GEOG 5842, is expected to provide the programming skill that our students need to compete at the job market. |
| <b>Pretest/ Post-test</b>                       | (a) Average pretest score was 47% and no student met the criterion ( $\geq 80\%$ ) for satisfactory performance. Pretest helped instructor to identify which basic concepts to review before delving into advanced concepts in the advanced course. (b) Significant student learning took place during the course of the semester; the average post-test score was 79%. Average | (a) Instructor reviewed basic concepts before delving into advanced concepts in the advanced course. (b) Pretest and post-test results were discussed in class; results will be discussed at faculty meeting in fall of 2010. | (a) Average pretest score was $< 50\%$ and no student met criterion ( $\geq 80\%$ ) for satisfactory performance. Pretest helped instructor to identify which basic concepts to review before delving into advanced concepts in the advanced course. (b) Significant student learning took place during the course of the semester although the average post-test score did not quite meet was criterion ( $\geq 80\%$ ) for | Instructors of Geog 5800 & 5830 will (a) modify/ improve assignments/ exercises to improve student learning & test scores in both the pretest & post-test & (b) add writing components to GIS courses. | (a) Average pretest score, 55%, is higher than the average pretest score, 49%, for previous semester. (b) The average post-test score, 81%, exceeded criterion ( $\geq 80\%$ ) for satisfactory performance.   | (a) Instructors of Geog 5800 & 5830 continue to work together to modify/improve assignments/ exercises to improve student learning & test scores in both the pretest & post-test. (b) | (a) Both the pretest and post-test average scores show improvements in student learning over the last 3 years. (b) Instructors of Geog 5800 & 5830 will continue to work together to develop additional activities and to improve student learning.   |

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|                                     | posttest score for this and all previous years exceeded the criterion ( $\geq 80\%$ ) for satisfactory performance |   | satisfactory performance.  |  |  |  |  |
| Capstone Project Portfolio & Poster | One student completed project & received "A." The quality of the project was excellent;                            | Faculty will continue efforts to improve student projects; student will be encouraged to present project at ILGISA (Illinois GIS Association) conference. | Student who completed project demonstrated competence in using the analytical capabilities of geospatial technologies to develop & implement a significant GIS project that address research questions; student received a grade of A for his project. | Since it was reported that two students in the course seemed to have a writing skill problem, it was recommended that a writing component should be added to GIS courses that students take prior to taking the capstone course. | All 5 students completed capstone project and received a grade of "A." All 5 demonstrated competence in using analytical capabilities of geospatial technologies to develop and implement a significant GIS project that addressed a significant research question(s). | Students were advised to present their research to the ILGISA (Illinois GIS Association) conference in the fall 2012; students are excited about the opportunity to present. | Student learning and the quality of projects completed by students have been improving over the years; |