# *Online Assessment Tracking Database*

Sam Houston State University (SHSU)
*2014 - 2015*

**Geography BS**

**Goal**

**Training Geographically Informed Students**

Students completing core education in geography will be able to demonstrate foundational knowledge of geographic principles and concepts about the physical world.

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**Objective (L)**

**First-Year Foundational Geographical Principles And Concepts**

Students completing core curriculum education in geography will be able to demonstrate foundational knowledge of geographic concepts and principles, including critical thinking.

**Indicator**

**Comprehensive Final Exam**

Common embedded questions on the comprehensive final exam will determine student knowledge regarding general geographic concepts.

**Criterion**

**70% Accuracy**

The average scores will be 70% correct on the general geographic concept questions embedded in the comprehensive exam.

**Finding**

**Performance On General Geographic Concept Questions**

Students enrolled in GEOG 1401 (previously GEOG 1301) averaged 59% on a series of specific concept questions embedded in a comprehensive final exam. Students enrolled in GEOG 1321 averaged 76% on a separate, yet very similar, series of concept questions. Scores for GEOG 1401 students were consistent with overall overages on the respective final exams, while scores for GEOG 1321 students were actually noticeably higher that final exam averages. The scores among students enrolled in GEOG 1301 were slightly lower than those from the previous year, although the scores among those enrolled in GEOG 1321 once again improved slightly.

**Indicator**

**Comprehensive Final Exam - Geographic Principles Portion**

The final faculty-developed comprehensive exam will indicate students' grasp of major geographic principles, including critical thinking.

**Criterion**

**70% Principle Accuracy**

The average score will be 70% correct of the major geographic principles and critical thinking items embedded on the comprehensive exam.

**Finding**

**Performance On Questions Pertaining To Major Geographic Concepts And Critical Thinking**

Students enrolled in GEOG 1401 averaged 60% on a series of questions focused on competency with major principles and critical thinking skills that were embedded in a comprehensive exam.

Students enrolled in GEOG 1321 averaged 72% on a similar series of questions. Students enrolled in both courses consistently scored lower than expected on questions requiring the interpretation of graphs and charts, but scores for both courses did improve, particularly in the case of GEOG 1401. Students enrolled in GEOG 1401 averaged 57% on such questions, while students enrolled in GEOG 1321 averaged 68%. Students enrolled in both courses scored signficantly lower than expected on questions requiring the interpretation of basic statistics, although scores for GEOG 1321 students improved significantly from the previous year. Students enrolled in GEOG 1401 averaged 52% on such questions, while those enrolled in GEOG 1321 averaged 59% on them.

**Action**

**Improving Geographical Understanding Of Concepts And Principles**

Students enrolled in GEOG 1321 continue to improve in regards to the level of competency in basic geographic concepts, major geographic concepts and in critical thinking. The same cannot be said for students enrolled in GEOG 1401, although students enrolled in this class did improve when it came to the interpretation of graphs and charts, a new priority for this class. However, it is probably not totally fair to compare the two classes directly, as they really do serve different purposes. By far, the majority of students enrolling in GEOG 1401 do so in order to fulfill a lab science requirement, while GEOG 1321 attracts students with some interest in the subject matter (although it does also fulfill a core requirement). Perhaps more importantly, most sections of GEOG 1321 enroll much smaller numbers of students. Nevertheless, we deem it necessary to continue to try to replicate some of what works in GEOG 1321 (group exercises, for example) in the lab portions of GEOG 1401. Students enrolled in both courses did improve when it came to the interpretation of basic statistics, although they still score below the designated acceptable level. We fully expect our efforts to emphasize this subject matter across the entire program to reap recognizable benefits as we go forward.

**Objective (L)**

**Demonstrate Knowledge Of Foundational Concepts Of Physical Geography**

Students completing the core education in geography will demonstrate knowledge of physical geography including the world in spatial terms, places and regions, and physical systems.

**Indicator**

**Physical Geography Concepts**

Students will correctly answer the embedded questions on exams throughout the semester that address physical geography. The areas of emphasis include the world in spatial terms, places and regions, and physical systems.

**Criterion**

**70% Accuracy On Physical Concepts**

Students will score 70% correct on those questions pertaining to each of the three areas of emphasis concerning physical geographical concepts.

**Finding**

**Student Results Concerning Physical Geography Concepts**

Students enrolled in GEOG 1321 scored on average 68% on those questions pertaining to the world in spatial terms. This score is slightly lower than the score found the previous year, and slightly lower than expected. Students enrolled in GEOG 1401 scored on average 61% on questions assessing this concept, less than expected and slightly lower than that of the previous year. Students enrolled in GEOG 2301 scored on average 73 % on these questions, a scorer higher than expected. Students enrolled in both GEOG 1321 and GEOG 2301 scored on average 71% on questions pertaining to concepts of places and regions, a higher score than was found the previous year (for GEOG 1321 at least), and a score that does meet expectations. Students enrolled in GEOG 1401 scored on average 62% on such questions, a higher score than realized previously although it still did not meet expectations. In those two assessment areas, students generally performed as well as they did on exams as a whole. Students enrolled in GEOG 1321 scored 67% on questions pertaining to physical systems, while students enrolled in GEOG 1401 scored 65% on such questions. Both scores were slightly increased from that of the previous year. Students enrolled in GEOG 2301 scored on average a 74% on these questions.

**Action**

**Improving The Learning Of Physical Geography**

There still remains considerable room for improvement in the delivery of basic concepts of physical geography and concepts pertaining to the world in spatial terms. Scores for students enrolled in both GEOG 1321 and GEOG 1401 declined from the previous year in regard to these subject matter. However, students do seem to be adequately learning physical geography in a separate course (GEOG 2301) which was just newly assessed this past year. Both GEOG 1321 and GEOG 1401 were recently redesigned but because they both serve specific core curriculum needs, the amount of time and energy that can be devoted to physical geography is limited. Environmental Geography (GEOG 2301), by comparison, is specifically designed around this subject matter. Likewise, GEOG 2355 and 2356 are specifically designed to focus attention on the “world is spatial terms,” thus their future inclusion in assessment may provide a better view of how well our students are actually doing in regards to this subject area. We are optimistic that we will come closer to meeting the expected level once students from these two courses are assessed.

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**Goal**

**Training Geographically Informed Students - Cultural Aspects**

Students completing the core courses required for a Geography degree will demonstrate knowledge of cultural geography including both

human systems and the interaction between the environment and society.

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**Objective (L)**

**Demonstrate Knowledge Of Cultural Concepts In Geography**

Students completing the core courses required for a Geography degree will demonstrate knowledge of cultural geography including both human systems and the interaction between the environment and society.

**Indicator**

**Cultural Geography Concepts**

Students will correctly answer the embedded questions on exams during the semester that address cultural geography. The areas of emphasis include human systems and the environment and society.

**Criterion**

**70% Accuracy On Cultural Concepts**

Students will score 70% correct on those questions pertaining to each of the two areas of emphasis associated with cultural geography concepts.

**Finding**

**Student Learning Outcomes Concerning Cultural Concepts**

Students enrolled in GEOG 3350 scored an average of 72% on a set of questions focused upon human systems. Students enrolled in GEOG 1321 and GEOG 2301 scored an average of 69% and 71% on those same questions. Students enrolled in GEOG 3350 scored 69% on questions concerning the interaction of the environment and society, while students enrolled in GEOG 1321 scored an average of 66% on these questions. The scores on these questions were below expectation for both courses, but they did increase significantly from the previous year. Students enrolled in GEOG 2301 scored on average of 73%, which is above expectation.

**Action**

**Improving The Learning Of Cultural Geography**

It would appear that the teaching of human/cultural geography is a departmental strength, as students are learning this material at a higher level than other subject matter assessed. This almost certainly relates to the fact that the majority of the faculty have expertise in human geography (as opposed to physical/environmental geography). This finding is also due to the fact that students enrolled in these courses are disproportionately older. Morevoer, far more of them are majoring in the field, compared to those enrolled in other courses. In future assessments, we plan on formulating the assessment so we can get more specific insight into particular sub-areas of cultural geography. For example, are there certain subject or geographic areas that students are more comfortable with, compared to others areas? Are they more or less familar with religion, or the culture of Latin America? Addressing more specfiific aspects of cultural geography would provide insight how to continue to improve in this subject area.

**Previous Cycle's "Plan for Continuous Improvement"**

Many of the weakenesses identified by student outcomes from this assessment represent weaknesses that have also been recognized on previous assessments. To that effect, we have proactively redesigned some of our courses to better serve the needs for enhanced critical critical thinking and to faciliate the learning of both basic and major geographical concepts. We have also attempted to replicate methodologies proven to be efffective in some courses (GEOG 1321) so that they could be implemented in other courses. Some of these methodologies, when applicable, will be implemented in lab sections so that we can take advantage of the intimacy of smaller class sizes. We plan to further improve upon this overall endeavor by incorporating the assessment of additional courses that better serve certain specifc goals, such as World Regional Geography and Environmental Geography. These courses should offer a better test of how well we our program is doing at teaching "regions and places" and "physical systems," respectively. Perhaps the biggest change we have made involves our efforts to fix the identifiable need to enhance student understanding of basic statistical measures, a weakness reflected within this assessment. Based on these results, we have restructured our degree requirements so that all geography majors will be required to successfully complete a basic statistics course. In addition, we have also incorporated some elementary statistical procedures within one of our introductory geography courses (GEOG 1321). Finally, we plan to continue our efforts to experiement with different ways to enhance learning across our curriculum in order to generate positive learning outcomes.

**Please detail the elements of your previous "Plan for Continuous Improvement" that were implemented. If elements were not implemented please explain why, along with any contextual challenges you may have faced that prevented their implementation.**

The most signficant change we implemented across the curriculum pertaining to last cycle's "plan for continuous improvement" relates to the requirement that all geography majors complete a basic statistics course. At this point, only students following the most recent catalog year are required to abide by this change, so its still too early to see the full impact of this new requirement. However, results from this past assesssment suggest that students enrolled in one introductory course (GEOG 1321) significantly improved upon questions requiring the interpretation of basic statistics. We feel this improvement could very well result from this new degree-specific requirement. This improvement probably also stems from the more inclusive implementation of statistical content in GEOG 1321, another change garnished from last year's assessment. As outlined in the plans from last cycle, this past year we also incorpirated the assessment of the newly offered GEOG 2301 (Environmental Geography) course into the OATDB. It is noteworthy that students in all courses assessed demonstrated improvements in regards to the display of knowledge pertaining to the study of "physical systems." We are confident that we have enhanced the teaching of this content via the regular offering of this new course (GEOG 2301). Our long terms plans also called for us to assess student learning within both sections of World Regional Geography (2355 & 2356), particularly when it comes to the assessment of learning pertaining to "world regions." However, we faced challenges doing so simply because the past year witnessed faculty using all time and energies devoted to these course as a means to ensure they where effectively fitting into the newly designed Core Curriculum. In short, while these courses were aasessed, departmental focus was on meeting newly revamped university-wide requirements as opposed to meeting the needs of assessment efforts. We have preliminary results from the assessment of these courses, but these results are not yet tabulated in a form to be presented here. Now that the "new" content of these two courses are mostly set, we anticipate fully incorporating them within assessment recording next cycle.

**Plan for Continuous Improvement - Please detail your plan for improvement that you have developed based on what you learned from your 2014 - 2015 Cycle Findings.**

Based on the assessment of 2014-2015, it would appear that we have improved somewhat in the teaching of both basic and major geographical concepts, but only among students

completing one of our introductory courses (GEOG 1321) assessed. Students enrolled in GEOG 1401 demonstrate scores that are persistently below the acceptable level. As identified earlier in earlier assessments, the dichotomy in regards to learning outcomes between the two courses is almost certainly due to the fact that the various sections of GEOG 1401 offered included rather large classes (over 80 students). These larger sections of GEOG 1401 (Weather & Climate) also enroll a cross-section of studies from across the university, as opposed to a disproportionately higher number of majors (which is the case with GEOG 1321). For this reason we plan to continue to more assertively implement methodologies that seem to work in GEOG 1321 into the smaller "lab" sections of GEOG 1401. The inclusion of a new course within the curriculum (GEOG 2301) seem to enhance the learning of physical systems among our students, an effect that seemed to prevail across all courses. For this reason, we plan to use the results of this assessment to explore the potential addition of more new courses that could prove valuable in increasing the learning of "niche" content critical to the realization of a geographic education (maybe an in-house statistics course designed specifically for geography majors?). Our most immediate plans call for the inclusion of two more of introductory courses in assessment efforts (GEOG 2355 & 2356). Given that these courses are designed to focus explicitly on subject matter pertaining to "world regions," a major learning goal of geography majors, we feel the incorporation of them in assessment efforts will help provide a clearer picture of what our students are learning and what they are not learning.