

UNIT REPORT

Geography and Geology, Department of

Assessment Plan Summary

Geography and Geology, Department of

Goal 1: Curriculum Development

Goal Description:

Promote and support the development and delivery of a rigorous, contemporary curriculum.[RELATED ITEMS/](#)-----  
ELEMENTS

RELATED ITEM LEVEL 1

Goal 1 Objective 1: Curriculum Review

Performance Objective Description:

Review the curriculum to improve sequencing of course offerings and identify need for new courses.

RELATED ITEM LEVEL 2

KPI Goal 1 Objective 1: Curriculum review

KPI Description:

The faculty in each program will review the curriculum in their respective programs. The review will consist of checking the sequencing of courses and looking at prerequisites for courses, as well as looking for insufficiently covered topics that may suggest the need for a new course. This includes looking at the expertise of new faculty to see if new courses may be possible. The review may also indicate the need for new faculty with the skills needed to cover a previously uncovered topic. The results associated with this KPI will simply be the report of the review's outcomes. Ultimately, a record of these annual reviews will establish a record of the program's curricular development.

Results Description:

The Geology Program is in a transition period as we work to hire a permanent sedimentologist. Therefore, the Geology Program review resulted in the status quo.

The Geography Program recently hired a physical geographer (he is finishing his first year at SHSU). Because of his expertise and a perceived need for this course in the Environmental Geography track, the Geography Program review recommended that Hydrology and Water Resources (GEOG 4430) be added to the Geography curriculum.

RELATED ITEM LEVEL 3

Action Goal 1 Objective 1: Curriculum Development

Action Description:

The faculty members of the Department will continue to meet and review the Department's curriculum to see what new courses may be needed and what courses may need to be deleted.

RELATED ITEM LEVEL 1

Goal 1 Objective 2: New courses

Performance Objective Description:

Development of new courses to satisfy needs identified during curriculum review.

RELATED ITEM LEVEL 2

KPI Goal 1 Objective 2: New Courses

KPI Description:

This will be represented by a report of new courses requested and a progress report of their passage through the curriculum cycle.

Results Description:

GEOG 4430 (Hydrology and Water Resources) is in progress within the current curriculum cycle.

GEOG 2320 Sustainability and Environment (dual-listed as BIOL 2320), GEOG 2341 (Physical Geography), GEOG 3310 (Sustainable Development), and GEOG 5312 (GIS ModelBuilder) were approved in the previous curriculum cycle. These courses have either been offered during the 2016-2017 academic year, or will be offered in the 2017-2018 academic year. In addition to the new courses, Environmental Geography had a number change going from GEOG 2301 to GEOG 3301.

RELATED ITEM LEVEL 3

Action Goal 1 Objective 2: New Courses

Action Description:

Monitor need for new courses and continue to watch their passage through the curriculum cycle.

Goal 2: Quality Faculty

Goal Description:

Promote the development of highly qualified and successful faculty members.

[RELATED ITEMS/ELEMENTS](#) -----

RELATED ITEM LEVEL 1

Goal 2 Objective 1: Quality Research

Performance Objective Description:

The department faculty will engage in quality, peer-reviewed research.

RELATED ITEM LEVEL 2

KPI Goal 2 Objective 1: Quality Research

KPI Description:

The faculty in the department will publish peer-reviewed books and articles. 80% of the faculty in the department will publish at least one peer-reviewed publication per year.

Results Description:

The faculty published a total of 14 peer-reviewed articles. However, only 7 out of 12 faculty actually published (about 58% rather than 80% which would have been about 9 or 10 faculty members).

RELATED ITEM LEVEL 3

Action Goal 2 Objective 1: Quality Research

Action Description:

Departmental faculty members are encouraged to publish quality, peer-reviewed research. The department will support this by providing time and resources to the faculty members. For example, funding travel for geographical or geological research. Travel for some geographers is equivalent to capital equipment for science faculty.

RELATED ITEM LEVEL 1

Goal 2 Objective 2: Quality Teaching

Performance Objective Description:

The faculty will provide quality teaching.

RELATED ITEM LEVEL 2

KPI Goal 2 Objective 2: Quality Teaching

KPI Description:

The department uses the IDEA system as the teaching evaluation instrument. The IDEA system is a nationally normed, validated and reliable measure of classroom performance. All faculty distribute the IDEA evaluations at the end of their classes each semester. The faculty member's scores are then compared to other faculty across the nation (IDEA database). 90% of the faculty in the department will be in or above the Similar converted score category on the adjusted Summary Evaluation.

Results Description:

Eleven out of twelve (about 92%) of the faculty IDEA results were in or above the Similar converted score category on the adjusted Summary Evaluation.

RELATED ITEM LEVEL 3

Action Goal 2 Objective 2: Quality Teaching

Action Description:

Once again the only scores in the Lower category of the converted scores on the IDEA form were associated with online courses. The return rate for online courses continues to be low despite faculty encouragement to respond to the evaluation. A way to improve the response rate must be developed, but so far our efforts have not worked. We are now seeing this issue associated with all courses since all courses are evaluated online. We will implement any best practices that are recommended to improve return rate.

RELATED ITEM LEVEL 1

Goal 2 Objective 3: Faculty support  
Performance Objective Description:

Provide funding and facilities to support faculty teaching and research.

RELATED ITEM LEVEL 2

KPI Goal 2 Objective 3: Faculty Support  
KPI Description:

The indicator of faculty support will be a report on the funding provided to faculty each year, plus an update on any new facilities provided for faculty use.

Results Description:

Faculty received all the travel support that was requested. Our new physical geographer received departmental support in addition the HEAF start-up funds. We were able to purchase a boat and motor, plus the instrumentation necessary to obtain stream cross-sections and velocity profiles.

RELATED ITEM LEVEL 3

Action Goal 2 Objective 3: Faculty Support  
Action Description:

The department will support faculty research by providing time and resources to the faculty members. For example, funding travel for geographical or geological research. Travel for some geographers is equivalent to capital equipment for science faculty. We will also fund maintenance contracts to support equipment that is already being used in the department.

Goal 3: Students

Goal Description:

Provide appropriate resources to promote student recruitment, success, and retention.

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Goal 3 Objective 1: Research Experience  
Performance Objective Description:

Promote student participation in faculty research.

RELATED ITEM LEVEL 2

KPI Goal 3 Objective 1: Research Experience  
KPI Description:

This year's report of student involvement in faculty research will serve as a baseline for setting subsequent improvement targets.

Results Description:

This turned out to be a less than ideal year to be making a report on student involvement in faculty research because one of our faculty members was serving his terminal year which cast a shadow over the whole department. There was some student participation in faculty research, but we are not in a position to use this as baseline data.

RELATED ITEM LEVEL 3

Action Goal 3 Objective 1: Research Experience  
Action Description:

Continue to promote student participation in faculty research.

RELATED ITEM LEVEL 1

Goal 3 Objective 2: Field Experience  
Performance Objective Description:

Provide field experiences for students majoring and minoring in Geography and Geology.

RELATED ITEM LEVEL 2

KPI Goal 3 Objective 2: Field Experience  
KPI Description:

This year's report of student field experiences will serve as a baseline for setting subsequent improvement targets.

Results Description:

A similar situation to what we had with student involvement in faculty research.

RELATED ITEM LEVEL 3

Action Goal 3 Objective 2: Field Experience  
Action Description:

We will continue to find new ways in which to provide field experiences for students majoring and minoring in Geography and Geology.

Update to Previous Cycle's Plan for Continuous Improvement

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Again, the only faculty that "appear" to be "struggling" are those teaching a number of online courses. We will continue to try to find means of improving the return rates, especially since all courses will be evaluated online in the future. We will also continue to encourage faculty to go to the PACE Center for workshops and/or one-on-one development meetings.

We will monitor our progress with respect to external funding that is being generated. We are going to continue to develop a graduate student orientation and expand our graduate student manual for our department to provide a means for graduate students and departmental faculty to get to know each other. As the number of graduate students pursuing a thesis increases, we are hoping to obtain graduate assistantships. We have applied for four assistantships again this year. Development of a GIS work room facility is in progress at The Woodlands Center. Involvement of undergraduate students in faculty research will also continue to grow.

Update of Progress to the Previous Cycle's PCI:

A new faculty member, a Physical Geographer, provides the skill set necessary to add and/or modify a number of courses in the Geography Program.

Some faculty members in the department have either sought help from outside sources or have revamped their online courses in an attempt to improve their online IDEA scores. Dr. Jim Tiller continues to work with SAM Online to update a number of his courses. Dr. Velvet Nelson has been working with campus sources as well as a publisher to improve her course. The scores still tend to be generally lower than face-to-face IDEA scores. It is also difficult to find consistency. What seems to work one semester, does not work the following semester. The same for IDEA return rates. We still have not found a way to get consistently high percentages of student completion of the IDEA evaluations in the online courses or face-to-face courses. We plan to continue to try the implementation of those recommendations made by the Office of Assessment with regard to the best practices for getting optimal return rates.

We have seen some increase in the number of external grants. We have had two major external donations to the research effort. One of these is the donation of over 10,000 pounds of drill core by a Houston petroleum company. The other donation is a \$300,000 SEM from the Texas Department of Transportation. The number of GIS graduate students pursuing a thesis has improved slightly and has resulted in a number of abstracts co-authored by graduate students and faculty members. It does appear that we will get four assistantships this year. We are not sure at the time of this writing whether or not we will be able to fill all of the assistantships. We are no longer pursuing the GIS facility at the University Park campus since SHSU seems to be withdrawing from that campus. We now have some space for GIS equipment at The Woodlands Center. We did experience some growth in the participation of undergraduates in faculty research. We will continue to seek opportunities for student involvement in faculty research and field experiences for students.

New Plan for Continuous Improvement

Closing Summary:

The faculty members of the Department will continue to meet and review the Department's curriculum to see what new courses may be needed and what courses may need to be deleted. We will monitor the need for new courses and continue to watch their passage through the curriculum cycle. For example, a new faculty member hired last year, a Physical Geographer, has the skill set necessary for the department to be able to add and/or modify a number of courses in the Geography Program.

Departmental faculty members are encouraged to publish quality, peer-reviewed research. The department will support this by providing time and resources to the faculty members. For example, funding travel for geographical or geological research. Travel for some geographers is equivalent to capital equipment for science faculty. This year may not be as productive as previous years because we have lost close to half of our funding for such support. We will also fund maintenance contracts to support equipment that is already being used in the department.

Once again the only scores in the Lower category of the converted scores on the IDEA form were associated with online courses. Some faculty members in the department have either sought help from outside sources or have revamped their online courses in an attempt to improve their online IDEA scores. Dr. Jim Tiller continues to work with SAM Online to update a number of his courses. Dr. Velvet Nelson has been working with campus sources as well as a publisher to improve her course. The scores still tend to be generally lower than face-to-face IDEA scores. It is also difficult to find consistency. What seems to work one semester, does not work the following semester. The return rate for online courses continues to be low despite faculty encouragement to respond to the evaluation. A way to improve the response rate must be developed, but so far our efforts have not worked. We are now seeing this issue associated with all courses since all courses are evaluated online. We will implement any best practices that are recommended to improve return rate.

We will continue to promote student participation in faculty research. We will also continue to find new ways in which to provide field experiences for students majoring and minoring in Geography and Geology.

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