UNIT REPORT

Geographic Information Systems MS
Assessment Plan Summary

Geographic Information Systems MS

Deliver A Curriculum With Appropriate Discipline Specific Knowledge

Goal Description:

Students will learn the appropriate advance Applied GIS knowledge and skills.

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Demonstrate Advanced Applied GIS Knowledge And Skills

Learning Objective Description:

1. Each student will demonstrate the ability to communicate knowledge of advanced applied GIS.
2. Students will acquire knowledge and skill sets that will make them competitive in the ever evolving GIS job market

RELATED ITEM LEVEL 2

Mastery Of Advanced Applied GIS Knowledge - Written Comprehensive Exams

Indicator Description:

All graduate students will demonstrate a mastery of applied GIS knowledge through a set of written graduate comprehensive examinations, administered by a faculty committee. The examination will consist of questions about the practical and theoretical basis for the application of Geographic Information Systems and Remote Sensing techniques to real world problems. A committee of faculty members with expertise in the subject areas will evaluate students' performance and give a mark of Fail, Pass, or High Pass in each examined area.

Criterion Description:

Each student needs to earn at least a "Pass" mark in each examined area to pass the written comprehensive exams. Each student is allowed two attempts. Faculty expect that at least 80% of graduate students will pass their exam on their first attempt. 100% will pass on their second attempt.

Findings Description:

In 2015-2016, 12 students took their comprehensive exams (8 students in Fall 2015 and 4 students in Spring 2016). Each student formed a comprehensive examination committee comprised of 3 GIS graduate faculty members selected by individual student. Thus the comprehensive exam had 3 sections based on questions submitted by 3 comprehensive exam committee members.

In Fall 2015, 1 student scored High Pass in 2 sections, 1 student scored conditional pass in two sections and 2 other students scored conditional pass in 1 section each. All students who scored condition pass re-took the section before the end of Fall semester and passed the respective sections. 1 students failed in two sections and re-took the exam in Spring 2016.

In Spring 2016, 3 students scored high pass and 2 students scored conditional pass in 1 section each. The students who scored conditional pass re-took the respective sections and passed. 1 student failed in 1 section and will re-take that section in Fall 2016.

RELATED ITEM LEVEL 3

Encourage more students to do thesis

Action Description:

Compared to previous years we have had more graduate students show interest in doing thesis and opt for thesis plan. However, few of those students opt out of thesis plan after spending few semesters. Last year a minor change was introduced into the graduate program that requires all students who opt for thesis plan are required to take a course on Research Methods. In addition, students are encouraged to establish a thesis committee and a thesis advisor early in the program.

Update to Previous Cycle's Plan for Continuous Improvement

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

The graduate GIS faculty continues to adopt strategies in order to improve the quality of the program. As number of GIS graduate students increases, we plan to broaden the subject matter and the range of skill sets that GIS graduate students learn. GIS faculty will continue to work on improving student knowledge related to Spatial Analysis. Another element of the graduate program that we plan to strengthen is the thesis track. In Fall 2014 the GIS graduate committee introduced a policy that required all graduate students on thesis track to take a class on Research Methods.

This will ensure that students who are on thesis track have the required skill sets to effectively conduct research and successfully complete their thesis work. As part of continuous improvement the committee will adopt other approaches to strengthen the thesis track

Update of Progress to the Previous Cycle's PCI:

The graduate GIS faculty continues to adopt strategies in order to improve the quality of the program. As number of GIS graduate students increases, we plan to broaden the subject matter and the range of skill sets that GIS graduate students learn. The program has offered new elective courses related to various fields and all those courses have been well received by students. These new courses have added to the knowledge base and skill set of our students.

Another element of the graduate program that we had planed to strengthen was the thesis track. The GIS graduate committee introduced a policy that required all graduate students on thesis track to take a class on Research Methods. This will ensure that students who are on thesis track have the required skill sets to effectively conduct research and successfully complete their thesis work. In addition, students are being encouraged to establish a thesis committee and choose a thesis advisor early in the program. As part of continuous improvement the committee will adopt other approaches to strengthen the thesis track.

Plan for Continuous Improvement

Closing Summary:

The graduate GIS faculty continues to adopt strategies in order to improve the quality of the program. As number of GIS graduate students increases, we plan to broaden the subject matter and the range of skill sets that GIS graduate students learn. GIS faculty will continue to work on improving student knowledge related to the most up to date geospatial technologies.

Another element of the graduate program that we plan to strengthen is the thesis track. In Fall 2014 the GIS graduate committee introduced a policy that required all graduate students on thesis track to take a class on Research Methods. This will ensure that students who are on thesis track have the required skill sets to effectively conduct research and successfully complete their thesis work. As part of continuous improvement the committee will adopt other approaches to strengthen the thesis track