Indiana State University

2004 - 2005 Academic Annual Report

Department of Math & Computer Science

Year in Review

Accomplishments

As you have heard, increasing public awareness of Indiana State University's accomplishments is crucial to building student enrollment, influencing policy makers, and developing a place of pre-eminence in the Midwest. What do you consider to be your department's 5-10 top accomplishments for the 2004-2005 year that will help contribute to this effort?

- in response to a very clear demand on the side of our graduate students, the CS group completed the design and submission of a new Masters program in CS - the Department has significantly increased the amount of moneys brought to the University via a number of successfull grant applications - in the area of research, department members have published 14 articles, with two more accepted for publication, presented 11 talks at conferences in the US and 8 talks at international conferences, published 9 reviews, refereed 12 papers for various research journals, and attended 8 conferences - the Department successfully organized a regional MAA conference attended in April 2004 by over 200 participants - Department members have actively worked in various committees throughout the University - one of the most important achievements was hiring a new department chair in 2005 - one of our graduates has been hired with the National Security Agency, a very good sign of recognition of the quality of our program - we have established a learning community for our incoming freshmen

Research and Scholarship

What is your assessment of accomplishments in the area of research and scholarship? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

department members have published 14 articles, with two more accepted for publication, presented 11 talks at conferences in the US and 8 talks at international conferences, published 9 reviews, refereed 12 papers for various research journals, and attended 8 conferences we would like to make research a more "collective effort" in the dept. - the new chair intends to establish some kind of a cooperation seminar

Grants, Contracts & Off Campus Professional Service

What is your assessment of accomplishments in the area of grants, contracts, and off campus professional service? Are you satisfied overall? In which areas do you feel your department does particularly well? In which areas do you feel your department needs to improve?

we have very much increased the number of grunts received in the dept in the last few years unfortunately, almost none of the grants are in the area of research - we needs to focus on undergraduate research funding possibilities there are also great many opprtunities for grants in Math Ed

Best Practices

Describe the progress your unit has made thus far. Were you able to take these steps? What

steps or goals have been particularly difficult to achieve and why? What practices, actions, initiatives are you doing that could be considered eminent?

the dept stands united behind the new chair in the willingness to improve the overall quality of our service to the ISU we expect many new good things happening in the dept

Student Credit Hours

What did you learn? What steps will you take during 2004-05 to meet your department's student credit hour target by fall 2005?

our dept has a very good student cerdit hour production what we would like to improve is the size of some of our Math classes - this is however closely related to attracting new Math majors into the program another step toward improving the size of the Math classes is a convergence plan that is being worked on with the MathEd program

Budget

Identify and describe any collaborative efforts that have been undertaken by your department with other academic or administrative units to maximize resources to meet departmental goals. Please also consider collaborative opportunities with external partners.

our main "other" source of funds comes from the IT program and money associated with it

Outreach

What are the outreach opportunities for your discipline? (non-traditional modes of delivery and timing, etc)

we started to offer a number of web based classes that seem to be very popular with the students - the classes over the web are beginning Math and CS classes, and some more specialized CS classes our MathEd program does not have any distance or web based classes yet we also traditionally teach a distance based Calculus 301

Assessment

For each program in the department, provide one or two examples of how the program is using assessment and evaluation (student outcomes, program review, and/or accreditation) to enhance student learning and program strength this year.

Our Math program review has been postponed twice with respect to hiring a new department chair. During the spring semester 2005 we have finally decided to implement the assessment tools described in the next section. We will start using them in fall 2005 for both Math and CS program. Math Ed program has been repeatedly praised for their use of assessment for improving the program. A capstone course for the MathEd program has been submitted to the appropriate committees.

Strategic Initiatives

Development Activities

What steps have you taken to support development activities in your department? How can your efforts be supported?

we have designed and submitted a new CS Masters program we are also considering starting a CS Education program

<u>Experiential Learning</u>

Please provide examples of experiential learning in which your department was engaged in 2004-2005.

Math Ed students are required to teach at local highschools as a part of their training the majority of our graduate students are employed on campus in various computer oriented positions

<div align="center">**Future Goals**</div>

<u>Future Goals</u>

The University is highlighting experiential learning, community engagement, and eminent programs as aspects of our campus that will attract students and resources. How is your department planning to contribute to these strategic initiatives in ways that will help ISU be recognized as a Pre-eminent University?

this question will be better answered by our incoming chair in the near future