Department Annual Report
2012-2013

Computer Information Systems

CIS – Programming

149

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Department Information

Current year goals

The goal for this year was to better explain to students the purpose of the program and the type of career they would obtain by earning credentials in this field. Another goal we wanted to accomplish was to reduce the complexity of the number of languages and methodologies used in our introductory courses in order to alleviate difficulties in tutoring and for students transferring from one section of a course to another.

We accomplished the first goal by better stating the program’s goals and means to obtain those goals. We had a career fair for which we built a series of posters for each program. Those posters did a great job at summarizing the program and presenting statistics for employment. The second goal was accomplished by choosing a single book for CO116, CO117, and CO217 and for using one specific language for all sections of CO116 irrespective of instructor.

Goals for next year

The programming community has shifted its focus toward smaller, hand-held devices as opposed to the traditional desktop and laptop computer. As such, students must learn new skills to adapt software to run on these platforms. Software languages have not changed much. Many languages come and go, but the core principles of programming remain and are found in them all.

In the coming year, we want to introduce course content across all programming courses that address mobile platform development. We also want to increase our focus on application security across our programming courses, particularly in the advanced courses.

Internal collaborations and partnerships

At this time there are no internal collaborations or partnerships in this program.

External collaborations and partnerships

At this time there are no external collaborations or partnerships in this program.

Departmental needs for support from other departments within the college

We are collaborating extensively with Katie Daniels, our Curriculum Design Specialist, as well as Institutional Research, in order to obtain data to give us guidance on the direction we should move and to redevelop an improved program and curriculum to support it.

Program accreditation Updates

No accreditations have taken place this year for this program.
Description of departmental advising plan and outcomes

The faculty within our department have successfully executed the advising plan for this program. The Department Head has had extensive and ongoing experience in industry and, along with continual contact with advisory committee members, keeps a close watch on trends, employer expectations, and advice to give students.

Updates About Student Organizations and Achievements

Students within this program have created user groups and have joined regional user groups. These collaborative efforts strengthen student knowledge and that is often brought into the classroom where everyone can benefit.

Other department updates

The CIS department is committed to making this program as strong as possible. The Department Head is in contact with software engineers and professors at Ferris and Davenport. Ferris in particular is a feeder off of our students, because a BS degree is typically expected for meaningful employment in this field. Therefore, as we prepare students to transfer, we need to make sure they are getting what they need during the first two years so that when they do transfer, they are as prepared as possible.

Feedback from the instructors at Ferris is very positive that students who take the advanced programming courses, most of which are taught by the Department Head, are very well equipped and have a higher caliber of knowledge than other students coming from similar institutions. This positive feedback reassures us, and yet we remain vigilant to ensure that quality doesn’t stagnate but continues to increase.

Faculty & Staff

Departmental Professional Development Activities (Contractual Obligations for Departmental Faculty Development/6 hours)

All faculty members in our department participate in bi-monthly curriculum planning and design meetings. The purpose of these meetings is to establish a plan of analysis and possible revisions of all our academic programs, including curriculum within each program. The meetings result in tangible steps, or “assignments”, each faculty member contributes to fulfilling so that we move forward and make progress as rapidly as possible while maintaining quality.

Faculty Professional Development Activities - Year End Summary

Tim Koets has worked extensively with Katie Daniels and Patti Trepkowski to analyze how successful this degree has been (measured by several benchmarks) and how best to improve it. This work has included research on pass rates, employment opportunities, concerns with
curriculum, the nature of the program and how it interfaces with the Department of Labor and surrounding institutions, and the creation of measurable plans in improving the program.

Faculty Development Plans for Upcoming Year

I expect each faculty member to contribute in designing a program to replace this program. I need members within my department to assess the place of and effectiveness of each course in the program. We need to determine what should stay and what should go, and if any new courses should be developed. Numerous opportunities for faculty development should present themselves as we progress through the upcoming academic year.

EOL/Release Time Work

No EOL/Release Time work used this year.

Faculty & Staff Accomplishments/Awards

No documented faculty and staff accomplishments, awards, innovations, or presentations for the 2012-13 academic school year.

Program Data- Perkins Indicators

1P1: Technical Skills Attainment
State Level Expectation: 91.08% Program Level: n/a Met Expectation: n/a

2P1: Credential, Certificate, or Degree Attainment
State Level Expectation: 26.93% Program Level: 9.52% Met Expectation: No Data Trend: no prior data available to determine trend

3P1: Student Retention and Transfer
State Level Expectation: 70.00% Program Level: 77.78% Met Expectation: Yes Data Trend: no prior data available to determine trend

4P1: Student Placement
State Level Expectation: 70.00% Program Level: 100.00% Met Expectation: Yes Data Trend: no prior data available to determine trend

5P1: Student Completion in Unrepresented Gender Groups
State Level Expectation: 23.62% Program Level: 11.54% Met Expectation: No Data Trend: no prior data available to determine trend
5P2: Student Participation in Nontraditional Fields

State Level Expectation: 26.52%  Program Level: 0.00%  Met Expectation: No
Data Trend: no prior data available to determine trend

Summary

The 2P1 indicator can be addressed by providing opportunities for students to take certification exams along the way through the program. Tim Koets and Szymon Machajewski are looking into certifications that are available. Tim Koets is also working with Keith Kelly at Northwestern College to develop a programming consortium where certification exams would be utilized extensively in a consortium of cooperating community colleges. An indirect result of this effort will be the integration of more certification exam opportunities in our curriculum.

The 5P1 and 5P2 levels can be raised, but I believe they must be done using marketing techniques. We need to get the word out to students in these categories that opportunities abound for them and that there is no barrier for their success.

Curriculum

Course Improvement Projects

We implemented a single language, Java, in the CO116 course across all sections. We also standardized on a single textbook before this became AGC policy later in the year. This has reduced the confusion of the tutors and students who move from one section to another.

Program Improvement Projects

We will continue to offer this particular program in both AA and AAAS formats based on community employer feedback who tell us that students with AAAS degrees would be considered if they have a passion for the craft and a desire to learn new and better ways of doing things. That said, we want to strengthen this program with more software security concepts as well as better target mobile development since that is what industry has presently targeted.

Course Document (CARP) Updates completed this year
CO117, CO122, CO124, CO156, CO205, CO255, CO262

Assessment of Student Learning

Please answer the questions below for each assessment project that you are working on this year. If you have more than one project, simply cut and paste the headers for each section below, in order to create a report for each.
Program Learning Outcome(s) assessed this year

We did not do a program learning outcome assessment for this program this year. The reason is that the department is doing a massive redesign of its programs across the board. We are creating new outcomes and objectives and revised curriculum for almost every program. Due to this massive undertaking, the additional effort of assessing program learning outcomes that may change was decided not to be the best use of limited resources this academic year. This decision was discussed and agreed upon by the Associate Provost and Dean of Instructional Support and Interdisciplinary Studies.

Measures of Student Learning
n/a (see explanation above)

Initial Data and Findings
n/a (see explanation above)

Curricular or Pedagogical Changes Implemented
n/a (see explanation above)

Data and Findings (post improvement/change)
n/a (see explanation above)