

Bus/CIT 2011-12

CIT - Web Programming Degree Development

Summary:

The Web Programming degree is again accepting students - in part driven by the huge demand of Trade Act students who need a computer technical alternative to existing CIT programs. As a result of an initiative that was funded last year, the programming courses in the first year as well as some of the programming courses in the second year of the program have been revised. This initiative involves the redevelopment of the remaining courses in the second year.

Description

There is strong demand for a full 2-year online (web) programming degree, driven in large part by the population of displaced (Trade Act) workers. CIT enrollment is up by as much as 60%. Just counting summer, fall and winter terms FTE is already up by 2% for the year, without counting spring enrollments. Many of these students are in the Web Programming degree that was reinstated this year.

An initiative that was funded two years ago allowed us to consult with local employers to determine the specific skills required by web programmer in the current marketplace and to redesign the degree program as a whole. Curriculum development for several of the programming courses in the first year (CIS 102, CS 133JS and CS 295P) was also completed as a result of that same initiative. Several courses in the second year of the program were redeveloped as a result of an initiative that was funded last year. (CS 133C#, CS 233C#, CIS 244, CS 27, CS 297)

The remaining programming courses in the second year of the program must now be redeveloped. These courses include: migration to a .NET web development platform in CS 295A and CS 296A.

Questions and Answers

How is the initiative linked to the Unit Plans most recently submitted?

1. How does it continue the achievement of those goals?
2. If this is a continuation of an initiative started last year, make sure that relationship is clear.

How is this initiative linked to the efficiencies and productivities plans you had last year?

1. How does it continue the achievement of these plans?
2. If this is a continuation of an efficiency or productivity plan started last year, make sure that relationship is clear.

Goals: Sustain Program Growth & Innovation

1. CIT has a strong curriculum development focus, both to create new capacity for students as in the Game Curriculum efforts, Network Security certificate, etc, and to maintaining currency and incorporating new innovations to existing programs. This is a continuation of this effort that addresses the changing needs in the Web Programming Degree. It also supports development of the new Health Informatics Degree and the Geographic Information Systems Certificate.

2. This is a continuation of the initiative from 2 years ago to reinstate the Web Programming Degree as well as an initiative to redevelop the curriculum in the degree from last year.

This curriculum will be developed to the maximum extent possible in alignment with Quality Matters goals for online curriculum.

Efficiencies

1. By continuing the push to develop curriculum for online delivery this work helps reduce efficiency constraints imposed by classroom capacity issues.

2. By better meeting student needs with the creation of ancillary online materials that support the instructional lab's tutorial and retention efforts that are ongoing productivity goals.

Describe the resources needed:

Curriculum development funding for four new classes and significant revisions and hybrid delivery for three existing classes:

CS 295A – 100 hours of curriculum development
Request: Carl Perkins (CD) 100 hours
Request: Curriculum Development 100 hours

CS 296A – 100 hours of curriculum development
Request: Carl Perkins (CD) 100 hours
Request: Curriculum Development 100 hours

Total 200 hours of curriculum development support:
Request: Carl Perkins (CD) 700 hours
Request: Curriculum Development 700 hours

What specific measurable program outcomes do you expect to achieve with this initiative? The outcomes should be specific enough to be measurable. Also, outline the method that will be used to determine the results.

There is significant demand for these topics which should generate a minimum of 7.5 FTE of new demand.

The success of this outcome can be easily measured by:

- assessing the fill rate of these sections
- data analysis that reveals the extent of new populations served
- data analysis that reveals the extent of popularity of these classes as elective/service classes

Department Priority:

6

Unit Resources:

This initiative can be fully supported with existing departmental computers, software, staffing and broad faculty participation with the faculty who are funded to do this development.

Funding Request: Carl Perkins

Is this a Career & Technical Education program approved by the state and offered through Lane for credit?

No

If not a Career & Technical Education program, does your request provide considerable support for students enrolled in these programs?

Yes

Do you have an advisory committee that meets 2-3 times per year?

No

If request is for personnel, will funds be used to replace an existing position?

How will funding this initiative increase or sustain the academic achievement and technical skills attainment (GPA of 2.0 or better) of Career and Technical Education students?

This initiative continues the redesign of the Web Programming Degree. It will broaden the web programming skills of CTE students to include both .NET and LAMP.

How will funding this initiative increase or sustain the number of CTE students that graduate or receive a one year certificate from Lane and help prepare the students for employment?

This initiative continues the redesign of the Web Programming Degree. The redesign is based on input from local employers of web programmers and will provide CTE students with skills specifically designed to meet the needs of local employers.

EQUIPMENT \$

COMPUTER HARDWARE \$

COMPUTER SOFTWARE \$

MATERIALS & SUPPLIES \$

CURRICULUM DEVELOPMENT (Hours)

440

PART-TIME FACULTY \$

TIMESHEET STAFF \$

TRAVEL \$

Can this initiative be partially funded?

Yes

EQUIPMENT \$

(E) Explanation of effect of partial funding:

COMPUTER HARDWARE \$

(CH) Explanation of effect of partial funding:

COMPUTER SOFTWARE \$

(CS) Explanation of effect of partial funding:

MATERIALS & SUPPLIES \$

(MS) Explanation of effect of partial funding:

CURRICULUM DEVELOPMENT (HOURS)

140

(CD) Explanation of effect of partial funding:

Partial funding of 140 hours will support minimal initial development of CS 295A, CS 296 A.

PART-TIME FACULTY \$

(PF) Explanation of effect of partial funding:

TIMESHEET STAFF \$

(TS) Explanation of effect of partial funding:

TRAVEL \$

(T) Explanation of effect of partial funding:

Funding Request: Curriculum Development

1. List the following information

- **Course Numbers (titles if not currently offered)**
- **Instructor Name(s) who will work on the curriculum development**
- **Whether each of the courses is in, or has been through, the curriculum approval process**

CS 295A – Mari Good. Brian Bird

Approved course with a change in technology

CS 296A – Mari Good, Brian Bird

Approved course with a change in technology

2. List each course number (or title) and the materials to be created for each class

- **Instructional goals, objectives, syllabi and outlines**
- **Lab instruction packets**
- **Practice, quiz, presentation &/or demonstration materials**
- **Other (specify)**

CS 295A, CS 296A
Instructional goals, objectives, syllabi and outlines
Lab instruction packets
Practice, quiz, presentation &/or demonstration materials
Online Moodle site1. Marketplace relevancy for Programming majors

3. List each course number (or title) and give your timeline for beginning and completing each course curriculum development.

CS 295A – Summer/Fall 2011
CS 296A – Summer/Fall 2011

4. What are up to 3 departmental instructional goals that are met through the development of curriculum in each class?

1. Marketplace relevancy for Programming majors
2. Increasing (quality matters) online instruction
3. Increased capacity to meet market demand for web skills

5. List each course number (or title) and give the value of the development of curriculum in each course to other faculty members.

CS 295A – Provides an elective to Networking
CS 296A – Provides an elective to Networking

6. List each course number (or title) and say how many students will be served by the development of curriculum in each class.

CS 295A – 20 - 30
CS 296A – 20 - 30

7. List each course number (or title) and give the specific benefits to students that you expect from the development of curriculum in each class.

Exposure to an additional web development technology. Hybrid or online delivery method.

8. List each course number (or title) and give the specific benefits for diversity that you expect from the development of curriculum in each class.

Hybrid and/or online delivery method provides access to non-traditional students.

9. List each course number (or title) and give the specific benefits to sustainability that you expect from the development of curriculum in each class.

Hybrid and/or online delivery method decreases natural resource and facility needs on the part of the college and natural resource needs on the part of students.

10. List each course number (or title) and give the specific effects on distributed learning that you expect from the development of curriculum in each class.

CS 295A – will be offered in a hybrid or online format
CS 296A – will be offered in a hybrid or online format

Hours requested for Curriculum Development funding:

Please enter the amount of one of the following:

- 100 hours maximum for new development.
- 70 hours maximum for course revision
- 50 hours for 3-4 credit conversion
- other (use if multiple courses addressed in one initiative)

Do not enter any characters other than numbers and a decimal.

How many hours are you requesting? If there are multiple courses addressed in the initiative, please list each course number (or title) and give the number of hours requested for each course.

200

Can this initiative be partially funded?

Yes

Partially funded curriculum development HOURS requested:

140

Explanation of effect of partial funding:

Partial funding of 140 hours will support minimal initial development of CS 295A, CS 296 A.

Funding Request: Technology Fee