

Bus/CIT 2008-09 Initiative: Online Development: CIT First-Year Gaming Courses

Summary:

To more effectively target specific populations by offering the Computer Simulation and Game Programming courses online (CS133G, CS233G, CS260, CS253, CS125G and CS135G).

Description:

Moving curriculum to be offered (or able to be offered) online is essential for reaching both high school students and professionals who are looking to advance in their careers.

The Computer Simulation and Gaming classes have been predominantly scheduled at late afternoon times (e.g. 4:00-6:00pm) in order to accommodate high school student schedules.

Strategic Direction

- Achieve and sustain fiscal stability.
- Build organizational capacity and systems to support student success and effective operations.
- Commit to a culture of assessment of programs, services and learning.
- Position Lane as a vital community partner by empowering a learning workforce in a changing economy.

Learning Plan Goals

- Create innovative, flexible and collaborative programs that are responsive to current and emerging needs of students and employers.
- Enhance student transitions at all levels.
- Support connected learning through inter-disciplinary and collaborative learning strategies.

Student Affairs Plan Goals

- Commit to a culture of routinely assessing programs, services, and learning to encourage continuous quality improvement.
- Create innovative, flexible, and collaborative programs that are responsive to the needs of students and employers and facilitate a smooth transition from college to the workplace.

- Strengthen relationships with high schools, transfer institutions, community partners, and employers to enhance the student's preparation for and success in college, career, civic engagement, and community involvement.

College Council Priorities

- 1.b. Enrollment Management: Recruitment and Retention
- 1.c. Enrollment Management: Workforce Development
- 1.e. Enrollment Management: Increase Credit Enrollment Level
- 4.1 Responding to unit plans/council plans: Innovation
- 4.2 Responding to unit plans/council plans: Curriculum Development
- 5.2 Instructional Redesign: Leveraging Technology

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.*

This is a continuation of starting the Computer Simulation and Game Development credentials (AAS and Pathways Certificate). This is intended as a major growth area for CIT, both in direct enrollment in the Pathways Certificate and program and also as a College Now and RTEC articulation area. To maximize regional scope for the program it is essential for it to be offered online.

Scheduling has been an issue for reaching high school students through RTEC, because it is constrained to times that high school students can come to main campus. That schedule constraint plus travel time overhead have been a major limiting factor that is being addressed by this initiative through online offerings.

The computer lab that houses this program area has antiquated seating arrangements that constrain FTE - offering these courses online will allow significant efficiency and productivity advantages.

All of this work is in keeping with current curriculum design, with Pathways Certificates built around AAS programs. This particular program is designed for aligning especially

well with both high schools and four-year institutions. CIT is one of the main target "program of study" areas of interest with area high schools, and programming job growth (high wage, high demand) is greatest for those with four-year degrees, so this level of flexibility and pathway design is essential to the success of this program.

CIS125G will also serve as a kind of service class for those interested in gaming literacy without necessarily pursuing a specialty in this area. This is in keeping with the dept interest in expanding these types of classes.

Describe the resources needed:

Curriculum Development

- 420 hours of curriculum development to develop 6 existing classes (CS133G, CS233G, CS260, CS253, CS125G and CS135G) online

Funding: Curriculum Development

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.

This initiative will result in:

- sustained and hopefully increased FTE in the College Now and RTEC programs.
- improved scheduling and capacity increases
- increased FTE without increasing cost/FTE

These outcomes are all directly reflected in data available for programs and certificates at Lane.

Department Priority:

9

Unit Resources:

The department provides the needed infrastructure for this curriculum - servers and server support - through ICP funds. The curriculum will be supported visibly in a wiki as a means for facilitating conversations and alignment within the related Pathway community, from high schools up to four-year institutions.

Approx \$4,000 of ICP funds were used this year specifically to create the necessary hardware upgrades to the labs 19/130 and 19/135 in order to support this curriculum.

This is a critical curriculum update for program development vis-a-vis both high schools and four-year institutions.

Carl Perkins Funding Request

Curriculum Development Funding Request

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*

CS125G SW Tools 1: Game Development

Jim Bailey

Current offering

CS133G Beginning C++ Programming for Games

Jim Bailey

Current offering

CS135G Software Tools 2: Game Development

Jim Bailey

Current offering

CS233G Intermediate C++ Programming for Games

Jim Bailey

Current offering

CS253 Computation for Computer Graphics

Jim Bailey

Current offering

CS260 Data Structures 1

Linda Loft

Current offering

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)*

CS125G

CS133G

CS135G

CS233G

CS253

CS260

Entire course available online

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

CS125G

Begin 7/08 and end 9/08

CS133G

Begin 7/08 and end 9/08

CS135G

Begin 7/08 and end 9/08

CS233G

Begin 7/08 and end 9/08

CS253

Begin 7/08 and end 9/08

CS260

Begin 7/08 and end 9/08

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

1. Creating a regional scope for the Computer Simulation and Game Programming degree and Pathways Certificate, creating a high-visibility program for use as a marketing tool.
2. Increasing enrollment and improved scheduling capacity.
3. Strong participation in area high school efforts with CIT as a program of study, and strong "flow through" to four-year studies as part of a comprehensive pathway.

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

CS125G
CS133G
CS135G
CS233G
CS253
CS260

CS125G has particular value as a high school articulation. The development of the art content of these areas and the programming content strengthens ties to all other areas of the curriculum even beyond the department. The alignment and development of CS260 strengthens a traditional programming transfer class. The pedagogical applications of gaming technologies will benefit all areas of study, and all faculty in providing new and innovative teaching methods.

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

CS125G
CS133G
CS135G
CS233G
CS253
CS260

These courses currently serve approximately 60-90 students annually. Through schedule and capacity improvements enabled by this initiative, and through increased use of these courses in high school College Now and RTEC programs, an increase in FTE is expected.

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.

CS125G

Increased availability and use as a college now and feeder class.

CS133G
CS135G
CS233G
CS253
CS260

Increased regional scope and availability, improved scheduling, improved per-section capacity/availability, better ancillary materials through online development.

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.

CS125G
CS133G
CS135G
CS233G
CS253
CS260

The general diversity picture in computer technical areas is one of increasing diversity in the computer science student population. This is particularly true with the changes in scheduling and instructional modalities that become possible with online material.

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.

CS125G
CS133G
CS135G
CS233G
CS253
CS260

The department has shifted the major focus of one of the full-time faculty toward the Computer Simulation and Game Development degree and Pathways Certificate. The alignment of resources and improvements in capacity, marketing, regional scope and alignment with high schools all make for significant benefits in sustainability of this effort.

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.

CS125G
CS133G
CS135G
CS233G
CS253
CS260

The target of this initiative is distributed learning, so the benefits here are immediate.

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.

420

Can this initiative be partially funded?

Yes

Partially funded curriculum development HOURS requested:

210

Explanation of effect of partial funding:

The benefits scale in direct proportion to the work that is done.

Technology Fee Funding Request