Science 2010-11

Retention and Success: BI 101K Introduction to Genetics Online Course Development

Summary:

This initiative is requesting curriculum development funding to develop an online version of the BI 101K Introduction to Genetics course.

Description

Funding would support the development of an online version of the Introduction to Genetics course. Introduction to Genetics is currently offered as a seat class. The course will fulfill 4 credits of science with lab required for the AAOT. The classroom version of Introduction to Genetics routinely fills and the online version of BI 102G (Genetics and Society) has filled both times it has been offered. Offering BI 101K on line will increase distance learning options in Biology, increasing availability and accessibility to a wider population.

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.**

Offering BI 101K online will fulfill both of the main themes in The Science Division's Unit Plan FY11:

1. Optimizing sustainable access for students and options for quality learning
2. Optimizing the curricula and resources we already have.

This course will allow us to increase the number of courses we offer for AAOT transfer without using more classroom resources.

The Unit Plans Goals and Initiatives:
1. Mangage enrollment effectively

Offering this course online will add sections of a high demand course, with out taking up more classroom space.

4. Increase online learning options for students
BI 101K Introduction to Genetics (online) is one of the course proposed to satisfy this goal.

5. Enhance curricula to support Health Professions, including online options
BI 101K fulfills part of the genetics requirements for the pre-nursing students. Offering the course online will increase accessibility without taking up more classroom space.

8. Implement assessment of student learning outcomes and gather student input for program improvements
Offering BI 101K online will allow for direct comparison between the online version of the course and the seat-class version.

BI 101K: Introduction to Genetics (online):
The main themes and goals in the Science Division's Unit Plan FY10 were the same for FY11 so offering BI 101K online continues those goals.

Describe the resources needed:

BI 101K: Introduction to Genetics (online):

70 hours of 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.

BI 101K: Introduction to Genetics (online):

- Increase FTE in Science courses (IRAP and EMPT data)
- Increase availability of quality online offering in Science
- Result in learning outcomes consistent with Lane's core abilities and values
- Meet Quality Matters standards (course review)

Department Priority:

5

Unit Resources:

Priority ranking for this initiative was determined by SAC members drawing numbers randomly. All the initiatives are valuable to the proposing disciplines and all have the support of the Division.

Existing curriculum to build the online version, SRC staff and resources to support students in the course, necessary technology.

Funding Request: Carl Perkins

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**

BI 101K: Introduction to Genetics (online)
Christine Andrews
Course has been approved and taught in the seat-class version for several years.

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)**

BI 101K: Introduction to Genetics (online):

- Review of Quality Matters standards at the beginning of the curriculum development process and again at the end for a quality check
- Instructional goals, objectives, syllabi and outlines
- Development of online labs to fulfill the lab requirement of the AAOT degree
- Development of assessment methods appropriate for Quality Matters standards for DL class and also comparison of outcomes from the online and seat version of the course

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

BI 101K: Introduction to Genetics (online):
Development will be done during the Summer of 2010. Completed by the end of Summer 2010; Science stakeholders meeting early Fall 2010; the course will be offered Winter or Spring 2011.

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

BI 101K: Introduction to Genetics (online):

Goal #1: Manage enrollment effectively
BI 101K Introduction to Genetics is a high demand class and offering it on line will increase the course offering without taking up classroom space.

Goal #4: Increase online learning options for students.

Goal #5: Enhance curricula to support Health Professions, including online options
BI 101K Introduction to Genetics fulfills part of the genetics requirement for entrance into the nursing program.

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

BI 101K: Introduction to Genetics (online)
Course development will be guided by the Quality Matters standards adopted by Distance Learning. The developer's use of the standards will help other faculty to review and revise online portions of their classes to increase student engagement and success.

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

BI 101K: Introduction to Genetics (online): up to 75 students per year (3 sections)

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.

BI 101K: Introduction to Genetics (online):
Students benefit from emphasis courses because they allow students to fulfill science requirements with courses that relate scientific concepts to areas in which the students are interested. This course will allow students to complete a science with lab requirement through distance learning. This course in combination with BI 102G: Genetics and Society, already offered on line, will fulfill the genetics requirement for the Nursing program.

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.

BI 101K: Introduction to Genetics (online):
Materials will be developed suitable to all learning styles. The online form attracts a wider population, including stay-at-home parents, working people and students in rural parts of the state that may be unable to attend during the day or regular class week. It will also be valuable to students already in the nursing program that can not attend regular class session (due to the nursing curriculum) but still need to fulfill the genetics requirement of the program.

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.

BI 101K: Introduction to Genetics (online):
Online classes may decrease environmental costs of driving to and from campus.

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.

BI 101K: Introduction to Genetics (online):
This course will increase the Science Division's ability to offer high demand science courses with out increased classroom usage.

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.

70

Can this initiative be partially funded?

No

Partially funded curriculum development HOURS requested:

Explanation of effect of partial funding:

Funding Request: Technology Fee