

Science 2010-11

ENVS 199 Natural Hazards Course Development

Summary:

This initiative is requesting curriculum development funding to develop a new Environmental Science course called Natural Hazards (ENVS 199) that can be taught online or in a traditional classroom setting.

Description

Funding will allow part time Earth and Environmental Science (EES) faculty to work together to develop course materials for a new course titled Natural Hazards (ENVS 199). This class will benefit students by providing a course that integrates geology, environmental science and sustainability topics. Students can relate to natural hazards so this will be an excellent opportunity to interest students in the core concepts of science. It will provide students with an additional online class choice and an additional sustainability related/focused choice. This course will expand international cultural awareness as it will require students to use the internet to research natural disasters around the world. The course requires no additional equipment.

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.**

We will be working toward the themes and goals of our most recent unit plan:

Themes:

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

Goals:

Goal 3: increase sustainability-related curricula in support of sustainability in learning goals. Earth and Environmental Science 199 will provide a new sustainability related/focused course.

The course will address human impacts on the environment and environmental impacts on humans. Human development practices often contribute to the potential dangers posed by natural hazards. This will also cover the required social and economic issues for a sustainability related/focused class as people living in poverty are most effected by natural hazards.

Goal 4: increasing online learning options for students

ENVS 199 will provide an online option in Environmental Science for students. This will provide them with an online sustainability focused course as well.

Goal 7: developing additional curricular enhancements to improve student success and provide more options for completing AAOT and other program requirements

ENVS 199 will attract and retain more students by offering an interesting course that addresses topics that affect everyone. Natural hazards, such as earthquakes, volcanic eruptions, flooding, landslides and wildfires impact people living in Oregon as well as around the world. Students have anecdotally expressed an interest in this topic.

The initiative continues the Division's commitment to meeting sustainability in learning goals as stated in our previous Unit Plans.

Describe the resources needed:

100 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.

Specific outcomes are:

- Increased options for student success.
- Increased FTE in Earth and Environmental Science
- Increased student level of satisfaction by offering a new course dealing with an interesting topic that is frequently in the news and applicable to everyday life.

Department Priority:

6

Unit Resources:

Priority ranking for this initiatives 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.

The following resources will be devoted to this project: faculty work time not offset by curriculum development hours to develop outcomes, topics, course materials; IT support for

online classes; equipment; classrooms; demonstration materials already available within the department; support from the Geology Stockroom materials; and support from the Science Resource Center (SRC).

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**

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Claudia Owen, Michele Mort and Mary Baxter are submitting this request. Additional part-time EES faculty may aid in the course development.

This course has not been through the curriculum approval process.

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)**

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Learning outcomes and assessments; selection of suitable text materials; presentation, demonstration and student engagement materials specific for the online format following Quality Matters Rubric; course packet, laboratory activities (suitable for online learning).

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

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The course development can proceed shortly after funding is received. Most course development will be done during Summer 2010, and completed during Fall 2010.

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

1. providing an additional sustainability related course
2. increasing our online offerings

3. optimizing sustainable access for students and options for quality learning; and
4. optimizing the curricula and resources we already have (continuing from FY10).

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

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Funding of this project will provide support for faculty to collaborate in the development of the course. This is a specialty course that integrates aspects from geology and environmental science. At least three part-time faculty members will be involved. The course development team will also collaborate with members of the Sustainability and Learning committee to ensure that sustainability outcomes are met.

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

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An online version could serve 40 students a term. A classroom version would serve 24 students per section.

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.

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- Provides an additional sustainability related/focused course and therefore increases student choices.
- Allow students to take a sustainability related/focused course online. This allows the students greater flexibility in scheduling.
- Students will gain an understanding of the interrelationships of human activities and natural hazards.

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.

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- Materials will be developed suitable to all learning styles.
- Course material will cover international hazards/disasters expanding student awareness of other cultures.

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.

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- This will be sustainability related/focused course that can support the Sustainability Coordinator program now offered at LCC.
- As an online course paper resources can be greatly reduced. Electronic media can be used for class work, exams, homework and research.

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.

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Online activities will be developed for use on Moodle.

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.

100

Can this initiative be partially funded?

Yes

Partially funded curriculum development HOURS requested:

70

Explanation of effect of partial funding:

Partial funding will result in a much delayed timeline. Fewer high quality online materials for the course will be developed

Funding Request: Technology Fee