# **Initiative Report for Adv Tech 2009-10**

# **Drafting - Curriculum Development for BIM (Building Information Modeling) Course**

### **Summary:**

Create and offer new curriculum for BIM (Building Information Modeling) course.

## **Description**

100 hours of curriculum development to create BIM (Building Information Modeling) course to meet existing unmet demand for BIM skills in the community and to attract new students, including working adults. Changes in the AEC (architectural, engineering, and civil) industries create a need for students to be prepared with these skills for employment. A course in the curriculum is being eliminated and this course added upon the advice of the Drafting Advisory Committee.

#### **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.

In every unit plan, our focus is to keep our curriculum and technology consistent with current industry practices. Therefore this initiative is linked to every unit plan we have submitted.

#### **Describe the resources needed:**

Estimated cost: \$4,384.21 with OPE to develop entire new curriculum.

#### **Curriculum Development**

• 100 Curriculum Development (\$4,384.21 each)

**Request:** Curriculum Development 100 hours (CD) \$4,384.21

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.

Students will find jobs using this modeling software. We are told by employers, community professionals, and our advisory committee that unmet demand is high.

#### **Department Priority:**

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#### **Unit Resources:**

Drafting faculty and portions of division dean and administrative staff time. The division has no funding available for this initiative.

**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

Curriculum Development for BIM (Building Information Modeling) course Jon Bridges or Margaret Robertson Pending. Plans are to submit course approval application to Curriculum Approval Committee at their January, 2009 meeting.

#### 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)

Instructional goals, objectives, syllabi and outlines to be developed based on the following topics: How to create details, develop the model, add views and sheets, tagging and scheduling, annotating and dimensioning, building components, site modeling.

Lab instruction packets to be developed.

Practice, quiz, presentation &/or demonstration materials to be developed, includes lectures and demonstrations, handouts, practice exercises, and drawing assignments

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

BIM (Building Information Modeling) course: Develop summer 2009; begin offering winter 2010

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

Meet existing unmet demand for BIM skills in the community and to attract new students, including working adults. Respond to Advisory Committee program recommendations. Changes in the AEC (architectural, engineering, and civil) industries create a need for students to be prepared with these skills for employment.

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

BIM (Building Information Modeling) course

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

BIM (Building Information Modeling) course: Will serve a cohort of 30 students per year.

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.

Increased employment opportunities due to expected improvement in local construction industry because of Lane Bond projects and University of Oregon basketball arena.

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.

Course materials are provided in a variety of formats to accommodate learners of differing abilities. When presenting illustrations that include humans, care is taken to include people from diverse cultural and ethnic backgrounds, of both genders, and with a variety of physical abilities. When visiting job sites and when inviting guest speakers, professionals from diverse cultural and ethnic backgrounds, of both genders, and with a variety of physical abilities are presented.

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.

BIM software contains a component for sustainable construction and life cycle analysis which will be studied during the course.

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.

**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?

No

Partially funded curriculum development HOURS requested:

**Explanation of effect of partial funding:** 

**Funding Request: Technology Fee**