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2007-2008 Instructional Grants

Projects which advance the General Education Goals by means of Instructionally-Enhanced and/or Technology-Enhanced Course Redesign

TEMPLATE FOR FINAL PROPOSALS

Final Proposal Deadline: Sunday, February 18, 2007

All final proposals should be electronically submitted as a Microsoft Word attachment by email: *mailto:instructional-grant@udel.edu*. Notice of receipt of final proposals will follow via email. Proposals will be reviewed by Center for Teaching Effectiveness and Information Technologies.

Title of Project	**Technology-Enhanced Project Archival System**		
Principal Investigator	**Jules Bruck**		
Rank	**Assistant Professor**	**E-mail**	**jbruck@udel.edu**
Department	**Plant and Soil Sciences**		
Co-investigator(s)	**Chad Nelson**		
Rank	**Assistant Professor**	**E-mail**	**cnel@udel.edu**
Department	**Plant and Soil Sciences**		
yes	***This project has been discussed with all department chairs of the Principal Investigator and Co-Investigator(s).***		

Nature of Project. Project will advance the following **General Education Goal**. *(select only one)*	
	Capstone – Goal # 7 is given priority in review of grant projects.
	Quantitative Reasoning – Goal # 1 is given priority in review of grant projects.
x	Student Multimedia Design Center – Goal # 1 is given priority in review of grant projects.
	Academic and Student Affairs – Goal # 7 is given priority in review of grant projects.
	Other *(please specify)* – Meritorious grant projects strongly supporting **one** General Education Goal will be considered.
To advance the above **General Education Goal**, this project will use. *(select as appropriate)*	
x	Problem-based Learning
x	Active Learning Approaches, e.g., case studies, collaborative learning
x	Technology, e.g., WebCT, multimedia, emerging technology
	Other *(please specify)*

Course Number	Course Title	Semester(s) Offered in 2007-08	Est. Students Per Semester	Percent Major
PLSC 332	*Basic Landscape Design **	Spring 07 & Sp. 08	16	80%
PLSC 167	Sketching and SketchUP**	Spring 07, Fall 07, Fall 08	16	80%
PLSC 330	Landscape Construction Systems**	Spring 07 & 08	16	90%
PLSC 331	Landscape Construction Details**	Fall 07	16	90%
PLSC 450	Planting Design**	Fall 07	16	100%
PLSC 267	Advanced CAD for Designers**	Fall 07	16	80%

Course fulfills the following University/College/Department requirements. n/a

*Required course for all Landscape Horticulture majors.
** Required course for all future Landscape Design majors.

1. Description of Project *(2 page limit)*

Please describe nature of your project, stating the instructional problem(s) to be solved.

The problem presented in this proposal involves the current inability of Landscape Design instructors to scan, archive, and plot oversized student projects created using vulnerable drawing surfaces. Landscape design students integrate Computer-Aided Design (CAD) with artistic renderings to produce unique designs. Projects are plotted from a CAD program onto bond paper, traced using ink onto thin trace-paper, and colored. The final trace-paper project is an unique work of art.

Once projects are artistically rendered using markers, colored pencils, pastels, and/or watercolors; scanning them is essential for reproduction and archiving. Students should have the ability to feed the fragile drawing surface into a scanner in a pristine state. If the project leaves the design room, it is at risk of tearing, wrinkling or ripping. Once the paper is compromised, it cannot be fed through a rolling scanner and the ability to digitally save the work is lost.

An ***Oversized Color Multifunctional Scanner/Plotter*** located in the design studio will help solve the instructional problem of having no way to duplicate, archive and share student work. The scanner/plotter of choice is the HP Designjet 820 MFP because of it's capabilities and compact design.

a. *How will the project impact student learning in the course?*

Student learning will be positively impacted in several ways. It will first solve the problem students currently have of not being able to share a design worked on as a collaborative effort. While students are engaged in a project, they spend countless hours in a studio room collaborating with other students. Instructors offer input and provide feedback, and students work together to solve problems in a creative manner. When students work collaboratively, and one original drawing is produced, there is no ability to catalog that work for individual portfolios. Because e-portfolios are a large piece of our commitment to our student's education, we need them to be able to share their collaborative product; post it to their websites; and include it in their personal e-portfolios.

Without this in-house technology, students are left without documentation of their work. With this technology, oversized student work can be stored as digital files and shared appropriately among group members

Secondly, currently, instructors are not capable of reproducing student work or archiving student work for future teaching needs. The best way to teach design is to show current students relevant visual examples. For our students to start fresh each semester without seeing what other classes before them have created is a great disadvantage to our program. With the ability to digitally save student work, we will post visuals on our department website and in WebCT; use the images in PowerPoint lectures; and also use student work in promotional materials.

Lastly, once students scan their images, they will have the ability in class to assemble a personalized e-portfolio. As John Zubizarreta said during the Winter Faculty Teaching, Learning and Technology Institute in January of this year, e-portfolios and learning portfolios give students the opportunity for reflective practice which will improve student learning.

b. *How will the project complement your current teaching activities (e.g. instructional approach, methods, pedagogy)?*

Current teaching methodology includes in-class critiques of student's work. This takes place in a classroom. The new MFP will complement instruction by allowing instructors to use digital images on WebCT and the Web to provide students an opportunity to view, critique, and post comments about images before and/or after class hours. Digital images available online will serve as a reminder of how to complete assignments and provide information for absent students. In addition, students can transfer images easily, allowing them to practice presentations, and to create and record virtual project presentations to clients using the Multimedia Student Design Center. Ideally, we will have students check out video equipment from the MSDC, record actual site data on digital video; capture digital site images; import graphics from the studio and create comprehensive videotaped presentations with all components necessary to defend their design solutions. Additionally, instructors will be able to conduct virtual critiques with other design instructors and/or design students in remote locations.

c. *How will the project impact department / college / university objectives*

According to the University of Delaware Faculty Handbook, "The central mission of the University of Delaware is to cultivate both learning and the free exchange of ideas. Graduates should know how to reason critically and independently yet collaborate productively." As stated above, this project will allow students to collaborate more efficiently and share outcomes more freely. This will encourage the free exchange of ideas and critical reasoning as instructors are able to institute web critiques of student work.

These new classes in Landscape Design, and the impending major, are viewed as an opportunity to attract students to the College of Agriculture and Natural Resources. This is illustrated by the College's commitment to hire additional landscape design faculty as resources to cultivate a productive program and attract students. This equipment will allow instructors to readily display their student's work online as well as in other marketing pieces for the College.

With this technology, oversized student work will effortlessly transfer to our departmental website to aid in promotion of the Landscape Design major. If promotion and website upkeep are successful, it is believed that Landscape Design can attract more students to the Plant and Soil Sciences department.

d. *How will the project best utilize existing departmental resources (e.g. equipment, software, facilities, expertise, personnel)?*

The department supports our efforts in Landscape Design by providing us with the funds needed to purchase and maintain our supply of cutting-edge computer assisted drafting and imaging software. The College CITA's and Web Designer are committed to helping us get student work onto a new departmental webpage.

2. Implementation *(2 page limit)*

Support involved in project (e.g., User Services, CTE, Library, Media Services)	Assistance confirmed (name of personnel)
HP Public Sector Sales	*Mark Evertson: Sales Representative*
Student Multimedia Design Center	*Dianna (employee at facility)*

a. *What is your timeline for development of the project (between July 1, 2007 and June 30, 2008)?*

July 1, 2007: Order Equipment from HP (HP Designjet 820 MFP)

July 21, 2007: Receive Equipment and Setup: in accordance with HP service center estimation of delivery time from date of order.

July 22-Aug. 15 Training on Equipment via manuals imbedded in equipment and their online support. Software Training of Archival package.

Aug. 15-22 Develop archival procedures for instructors and students to follow when using the MFP and software.

Fall, 2007

- ☐ Archive fall semester student projects throughout the semester (ongoing); promptly post student work to department website, student blogs and WebCT.
- ☐ Introduce e-portfolios in fall courses.
- ☐ Introduce new project utilizing the Student Design Center's facilities to create a video presentation of site and solution synthesis.
- ☐ Ongoing amendment of WebCT to maximize student's educational resources.

Winter, 2008 Work out any problems encountered during the semester with equipment and/or software. Review syllabus and prepare WebCT for Spring Semester.

Spring, 2008:

- ☐ Archive spring semester student projects (ongoing).
- ☐ Further instruction on e-portfolios and presentation of multimedia technology.
- ☐ Students can learning from the video projects created during the first semester at the SMDC. Current students can develop more comprehensive and more detailed video presentations using the studios at SMDC. We will post the students videos online with the digital images of their work for critiques. Potential employers can be invited to watch presentations which will encompass a student's ability to communicate through speaking and drawing.

b. *What stumbling blocks do you anticipate which may hinder the success of the project?*

In accordance with the feedback received from the pre-proposal committee, I intend to eliminate the initial survey of past graduates. As indicated, "the conclusion is already drawn" and confirmed by the instructors experiences and as well as their contacts within industry.

Instead I have taken into consideration the reviewer's advice regarding the use of a specific archival database. There are many software choices available, but according to the Top Ten Reviews of Photo Organizing Software for 2007, Microsoft Digital Image is the Gold Standard. Another good option, because of the cost (free) and capabilities, is Picasa by Google. Both software packages allow users to find, organize and share photos. Digital Image costs $34.99 and Picasa is free, so my goal is to try both programs over the summer to determine which one best fits our program needs.

Perhaps we will stumble in this project when looking for the perfect archiving software that we find user friendly and capable. In researching the above software, it seems that both are rated "easy to use," however, I am unfamiliar with the software and have no way of knowing what they mean by "easy."

A second stumbling block may come from the instructors having to be pre-trained on all of the equipment available in the Student Multimedia Design Center. According to Dianna, who works at the center, there is no instruction available for the video capturing and editing. I am sure that we can work with the PRESENT and Bryce Spencer in the summer before our classes start to determine how we can best use the 4 AV studios available to us at SMDC.

c. *How will the project be sustained by your department / college upon completion?*

The department has shown great commitment to our project. Don Sparks, Department Chairperson of the Plant and Soil Sciences Department, reviewed the pre-proposal and was enthusiastic about our efforts to improve both the design studio and the quality of student learning. Tom Sims, Associate Dean for Academic Programs & Research for the College of Agriculture and Natural Resources, has been very supportive as well. He regularly checks-in concerning the progress of this grant proposal and is encouraging in every way.

Because there is strong College and Department support for the design program, there is ongoing support in the form of monetary funds to keep up the scanner ink and print heads after the grant money is exhausted.

3. Assessment *(2 page limit)*

An assessment guide is available at www.udel.edu/cte/eval.htm.

Support involved in project (e.g., CTE, Office of Educational Assessment)	Assistance confirmed (name of personnel)
During Managing Student Writing Workshop, Jan. 16-18, 2007, I was instructed on the use and creation of rubrics for assessing learning.	*Dee Baer*
During Managing Student Writing Workshop, Jan. 16-18, 2007, I was instructed on the value of revisions. Very beneficial in assessing writing and communications of all kinds.	*Melissa Ianetta*

a. *Describe how you will evaluate the students' learning. What assessment means will you use to evaluate student achievement of project goals (e.g. assignments, student work, portfolios, types of exams)?*

Student learning will be evaluated by the critiques of their assigned landscape design projects. Critiques are attended by the landscape design instructors as well as professional designers and architects; art instructors; and other members of the horticulture faculty at University of Delaware.

Students will be required to create an e-portfolios of their design work and in that portfolio, grading will include a section on reflections. Currently, they are required to present a final project in each course using their original drawing pinned-up to a poster board. Now, they will be required to present a multimedia project. Student grades will reflect their inclusion of the new studio archival technology integrated with the technology available at the Multimedia Design Center.

A rubric for each learning assignments will be created and used for self-assessment, peer assessment and instructor grading. The rubrics will ensure that the students are aware of the instructor's expectations as well as grading criteria. For a multimedia design project, rubric criteria may include scales for the following: "selection of graphics and written communication;" "reflections;" "use of multimedia;" "ease of layout and/or organization;" "writing and/or oral mechanics."

b. *How you will determine the effectiveness of the project?*

Ultimately, student feedback will determine the effectiveness of the project. Over time, through the continued implementation of an alumni survey (already in existence within the department), and with course evaluations, we will begin to form a picture of the perceived value of our efforts to archive and "show off" our student work. Students who are admitted to graduate school or who obtain their first job based on their e-portfolio and the communication skills learned in the process of creating video presentations (using the requested technology) will be our best measure of success. In quick time, we will determine the effectiveness of this project in recruitment through a more valuable website and other promotion materials.

Funds Requested - typically awards have not exceeded $20,000 *(2 page limit)*

Address each aspect separately in preparing your project budget.

ITEM	AMOUNT REQUESTED	DEPT/COLLEGE actual and in-kind funds	EXPLANATION/JUSTIFICATION **Jules Bruck** June 28, 2007
TOTAL of Budget Items	$20,000.00	$7313.00	
Faculty summer S-contract	$2,375.00	$2,375.00	*Faculty summer total amount by rank including appropriate fringe benefits (8% no summer retirement) or (37% summer retirement) may not exceed $4,750 Asst; $5,410 Assoc; $6,300 Full Professor. For equipment training and training on all software at the MDSC so that classes can use equipment appropriately come fall, 2007.*
Graduate stipend	0.	0.	
Graduate stipend fringe 4%	0.	0.	
Graduate student non-contract (no fringe), or undergraduate student misc wage (no fringe)	0.	0.	
Consultant non-UD S-contract	0.	0.	
Consultant non-UD S-contract fringe 8%	0.	0.	
Equipment (itemize/detail)	$17,625.00	0.	HP Designjet 820 MFP
Software (itemize/detail)	0.	0.	HP includes all necessary software to run equipment. Photo Archival Software to include: Microsoft Digital Image.
Supplies & Books (itemize/detail)	0.	0.	Ink Cartridges and Print heads for initial set up. Ongoing departmental support for replacement as needed.
Conferences & Travel (itemize/detail)	n/a	n/a	

Other (itemize/detail)	0.	n/a	Delivery and setup of equipment to the studio. Initial installation one time cost.
Sustainability costs	0.	½ - From Department 3-yr/Care Pack $2024.50	Costs to be covered to sustain course and maintain equipment and software once grant funds are expended are from department or other outside source.
Pending support from other source(s)	n/a	n/a	n/a
Prior grant(s) (2000-2006)	0.	0.	New Assistant Professor: No prior grants.