Updated 9/19/03

Duke University Instructional Technology Innovation Grants
Fall 2003 Call for Proposals
for projects beginning in Spring 2004 or Fall 2004

Call for proposals – September 25, 2003
Brief Initial Applications due October 27, 2003

Program Overview

Duke University is providing $275,000 in incentive grants to encourage faculty to explore and develop highly innovative applications of technology to address instructional needs. The Center for Instructional Technology administers these grants. Proposals are reviewed and selected by the Center for Instructional Technology advisory board. That advisory board consists of faculty from each school plus one representative each from the Center for Teaching, Learning and Writing, the Office of Information Technology, the Library and the Center for Instructional Technology.

Applications are invited for projects that will begin in Spring 2004 or Fall of 2004 and be completed by the end of Spring 2006.

There is a two-step process for submitting project proposals. A brief Initial Application Form is due October 27, 2003. CIT will invite full proposals based on information in the Initial Application Forms submitted. Full proposals are due January 16, 2004. The Center for Instructional Technology advisory board will review full proposals and select projects for support. The CIT will announce project awards in late February, 2004 and distribute funds in April, 2004.

Detailed information about previous grant awards and other CIT project support programs is available at: http://cit.duke.edu/funding/

What types of projects will be supported?

Projects must demonstrate highly innovative approaches to using technology to improve learning or use existing technologies to make fundamental changes in the approach to teaching a subject. Proposals must have a clear statement of educational impact and a well-defined process for assessing educational outcomes. Proposed projects should be likely to attract external funding or already have some support from other sources.

We especially seek projects that involve multiple faculty within a department or school, will be used in several classes during the initial project, will explore technologies not yet in wide use at Duke, are well planned, include departmental staff who will assist with the project and will result in models or information that can be utilized by other departments. Projects might include:

- Significant revision to a large introductory course using IT
- Creating online program for students studying abroad
- Pilot project as first step in seeking external grant
- Revising sequence of courses to utilize technology
- Developing new software tools for extensive use in several courses
- Incorporating an existing software tool into a major segment of the curriculum
- Developing new digital scholarly information resources which will be used in multiple courses

View examples of projects funded through CIT innovation grants

View examples of innovative projects at other schools

Who is eligible to submit a proposal?

All Duke University instructors including faculty, lecturers and graduate student instructors, and staff who work with

teaching faculty are eligible to apply. Project leaders must be working full time at Duke for the duration of the project. Because this program seeks projects which will have broad impact, projects must involve multiple instructors or an instructor working with staff and/or graduate students.

How may innovation grant funds be spent?

The total funding for innovation grants for 2003-04 is $275,000. We expect to fund two to eight projects from that pool of funds.

Funds from this program CAN be applied toward:

- á • Purchase of specialized hardware or software necessary for the project and not available through other university facilities.
- á • Wages for student workers or teaching assistants directly connected to the project.
- á • Faculty stipends or graduate student support as justified by the project plan and approved by the department chair and dean.
- á • Payment to contract workers for programming, web development and other technical services.
- á • Proposals may request dedicated consulting time from CIT staff as part of the grant; e.g., 25% of a CIT staff consultant for six months to help a program plan and implement a project.

Funds CAN NOT be used for:

- á • Standard computing equipment typically acquired through departmental or school funds
- á • Establishing new classrooms or labs or upgrading those facilities
- á • Personal or departmental equipment purchase when other university facilities, such as the CIT Instructional Lab or the Cynthia Sulzberger Interactive Learning Lab, can be used.

Work on a project funded through this program falls under standard University policies on copyright, patents and royalties. (See http://www.provost.duke.edu/IntelProp.pdf

What obligations do grant recipients have?

Instructors receiving support through this program will be expected to:

- participate in an initial planning meeting with CIT staff
- meet once in Fall 2004 and once in Spring 2005 with CIT staff to discuss progress on the project
- implement the project during the 2004 -2005 or 2005-2006 academic year
- write a report summarizing project outcomes and grant spending
- share information about the project via a web profile (see http://cit.duke.edu/profiles) and through a campus presentation, such as the CIT Instructional Technology Showcase.

What are the criteria for selecting projects?

Individuals considering submitting a proposal are strongly urged to meet with a CIT staff member at least one week before the proposal due date. A CIT consultation will help you prepare the best possible proposal and make sure you have addressed the criteria below. To ensure that CIT staff are available to discuss your proposal, schedule a consultation [link to http://cit.duke.edu/contact/index.html] several days before you want to meet.

The CIT Advisory Board will review proposals based on the criteria shown below.

Innovative use of technology to address an instructional need

Proposals must include clear educational goals and an explanation of how the project will accomplish those goals through a creative and appropriate use of technology. We are seeking projects that will make major changes to your curriculum or demonstrate a fundamentally different way of approaching teaching through the use of technology.

Broad and continuing impact:

The project must be likely to have significant impact in at least one of these ways:

affects a large number of students, or

involves more than one instructor, or

serves as a model which can be generalized to other courses/departments.

Project proposals must indicate that the department or school is aware of the continuing costs of the project after the CIT funding ends. We are especially interested in projects that produce materials or models that can be used by other instructors.

Feasible project plan:

The review committee will consider whether the project is carefully planned, whether necessary personnel have been identified and whether the proposed timetable and outcomes of the project are realistic. Applicants should discuss their project ideas with their department chair and with technical support staff in their school to determine impact on school resources. All projects in Arts and Sciences departments must be discussed with Melissa Mills, Associate Dean for Computing in Arts and Sciences (or someone she designates) before submitting a proposal. Projects must have some component that can be implemented in at least one course no later than Spring 2006.

Fit with school and/or department priorities:

Commitment from the school or department increases the likelihood that the project will be completed and used. Proposals must include a clear statement of how the project supports department and/or school goals and indicate that the department or school is prepared to absorb the ongoing costs of the project after the CIT funding ends. All proposals require a signature from the department chair or academic dean. We urge you to begin talking with your department chair and dean in the early planning stages of your proposal and have them provide letters of endorsement showing that your project is a departmental priority.

What resources are available to use in planning or implementing an instructional technology project?

CIT staff will meet with you to discuss your project idea. Request a consultation [link to http://cit.duke.edu/contact/index.html] several days before you want to meet.

The Examples [link to the revised version of http://cit.duke.edu/funding/examples.html] section of this document will give you ideas about the types of projects that fit this funding program.

What if I have an idea for project but it doesn't fit the funding guidelines?

The CIT has a variety of options for helping faculty with instructional technology projects. Information about other CIT project support programs is available at: http://cit.duke.edu/funding/

If you would like notification of future grant programs and instructional technology initiatives, join the CIT mailing list: http://cit.duke.edu/cgi-bin/maillist.pl

What is the proposal and project timeline?

Initial Application Form due... October 27, 2003

Invitation for full proposals.. December 8, 2003

Full proposals due from those selected................................ January 16, 2004

Announcement of selected projects:.................................... late February, 2004

Funds transferred to projects.. end of April, 2004

Implementation of projects.. between Spring 2004 and Spring 2006

Presentations about projects.. April 2005 or April 2006*

Written report on projects submitted to CIT advisory board..... May, 2005 or May, 2006*

*depending on planned project completion date

How do I submit a proposal?

There is a two-step process for submitting project proposals. The first step is to fill out the Brief Application Form below and submit it by 5pm on October 27, 2004. The form is available as a Word template, or a .pdf document.

Print the completed application form and fax to:

CIT Project Proposal
919-660-5923

Or deliver in envelope marked

CIT Project Proposal
Room 220 Perkins Library

CIT will invite full proposals based on information in the brief application forms submitted.

Brief Initial Application Form for CIT Innovation Grant
DUE DATE: by 5pm on October 27, 2003

Make sure you have read the full Call for Proposals and reviewed the criteria for selecting proposals!

FAX to CIT Project Proposal c/o Sean Aery 660-5923	OR send via campus mail to: CIT Project Proposal c/o Sean Aery Box 90198	OR deliver in envelope marked: CIT Project Proposal c/o Sean Aery Room 220 Perkins Library

Project title:
_____

Project leader and key contact person for project:

Name:

Dept:

Phone:

Campus mailing address:

Email:

Status (Faculty/Staff/Graduate Student/Undergraduate Student):

Role in project:

List all other project participants and for each one, indicate:

Name:

Dept:

Phone:

Campus mailing address:

Email:

Status (Faculty/Staff/Graduate Student/Undergraduate Student):

Role in project:

Courses that will directly use some part of this project:

List course title, semester and anticipated enrollment for each course in which this project will be used.

Course #	Course Title	Semester	Expected enrollment

Project impact (check all that apply)

Project will improve the quality of teaching and learning at Duke University

Project audience includes registered Duke University students

Project affects multiple courses or multiple sections of a course

Project affects large number of students

Project will serve as a model which can be generalized to other courses/departments

Project involves multiple faculty either within department or school, or across departments or schools

Project directly contributes to department or school curricular goals and is endorsed by department chair and/or academic dean

Feasibility/Sustainability (check all that apply)

Project leader will be at Duke full time for duration of project.

Project can be implemented during 2004 -2005 or 2005-2006 academic year

Project has been discussed with department chair or academic dean and includes a plan for sustaining activities after this CIT grant ends

Project has been discussed with school IT staff and has their endorsement. (Proposals from Arts & Sciences faculty must be discussed with Melissa Mills, Associate Dean for Computing, or her designee, at least one week before submitting.)

Project already has some funding from other sources or will be developed into proposal for external funding

Project description

In three pages or less, answer the following questions:

1. What do you plan to do in this project?

2. What are your educational goals for the project?

3. How is your project unique enough to warrant funding?

4. What general strategies do you plan to use to assess the educational impact of your project?

Resources needed for the project

You do NOT need to provide a detailed budget in this initial application form. Instead, use the tables and checklists below to describe the resources you think you would need to complete your project.

Estimate of computer equipment and software needed for this project.

In this table, list computer equipment and software you would need for the project and indicate how much of that you would need funded through the CIT grant. Add rows as needed. The Project Description (above) should indicate how the equipment would be used.

Item	Intended user(s)	Intended use	Are CIT Funds needed?

Estimate of project personnel needed for this project.

In this table, list personnel who would be needed to complete this project and indicate how much of that you would need funded through the CIT grant. Add rows as needed.

Project participant name or role	Currently available or to be hired?	Tasks this person will do	Estimated total hours or % of person's regular job for duration of project	Are CIT Funds needed?

What CIT assistance would you need for the project?

Consulting on project planning

Training in scanning images or text

Training in creation of digital audio or video materials

Other training (specify):_____

Instructional design consulting

Web design assistance

Assessment planning

Other: _____

If you discussed this proposal with a CIT staff member, list his/her name here: _____

What assistance from school or departmental IT staff would be needed for the project?

You should discuss these needs with your school or departmental IT staff before submitting your application.

Help installing or using hardware, software

Help using multimedia classroom

Training or consulting on: _____

Other: _____

Signatures page:

Applicant

If project is selected, I agree to:

- participate in an initial planning meeting with CIT staff

- meet once in Fall 2004 and once in Spring 2005 with CIT staff to discuss progress on the project

- implement the project during 2004 -2005 or 2005 – 2006 academic year

- write a brief report summarizing project outcomes and accounting grant fund use

- share information about the projects via a project profile (see http://cit.duke.edu/profiles) and through a campus presentation such as

I understand that work on a project funded through this program falls under standard University policies on copyright, patents and royalties. See http://www.provost.duke.edu/IntelProp.pdf

Applicant name (printed): _____

Signature of applicant: _____

Endorsement by department chair or academic dean:

Your signature indicates that you have read the applicant's proposal for CIT grant funds and endorse this proposal on behalf of your department. The applicant should have discussed with you how this project will affect departmental/school resources during the project and after the CIT funding ends.

Department chair or dean name (printed): _____

Signature of department chair or dean: _____

Endorsement by department or school IT support staff:

Your signature indicates that you have read the applicantÕs proposal for CIT grant funds and have discussed with the applicant how this project will affect departmental/school resources during the project and after the CIT funding ends.

IT Staff member's name* (printed): _____

Signature of IT Staff member*: _____

*Arts & Sciences proposals must be signed by Melissa Mills, Associate Dean for Computing

Examples of projects funded through CIT innovation grants

The total funding for innovation grants for 2003-04 is $275,000.
We expect to fund two to eight projects from that pool of funds.

Metzloff, Tom, Professor, Miller, Wayne, Dir. Ed. Tech., Shoemaker, Todd, Media Production Coordinator, Wood, Sarah, Attorney Law School	Distinctive Aspects of US Law Video Project	$38,000	Develop web-based, video teaching materials for 15 critical issues in American Law. The materials will be developed in modular format so they can be used by multiple courses.
Roy, Chris, Instructor, Woerner, Todd, Lecturer, Sebahar, Holly, Instructor, Dechand, Billy, Staff Guest, Christie, Graduate Student Chemistry Department	Use of Web Based Instruction in the Organic and Advanced Chemistry Laboratories.	$4,258	Develop digital video and web software to help students better understand concepts in lecture and laboratory courses in organic and advanced chemistry.
Linda Goodwin, Brenda Nevidjon, Fred Westbrook, Ruth Anderson, Terris Kennedy, Diana Cobb School of Nursing	Improving Online Teamwork Using Computer Supported Cooperative Work Technologies, School of Nursing	$32,500	Compare various software/groupware and hardware options available for collaborative teamwork in online courses in Health Systems Leadership. Provide summary information useful to other departments/schools considering online collaboration activities.
John Taormina, Sheila Dillon, Hans van Miegroet, Richard Powell, Stanley Abe Art & Art History	Development of a Digital Image Archive and Database for Art and Art History Instruction and Research, Art and Art History Department, Trinity College of Arts & Sciences	$14,400	Develop a permanent, expanding digital archive of art, architecture and archaeology images with an accompanying comprehensive text database to completely update the teaching of its introductory art history survey courses. Their project will use Luna Imaging Insight software licensed by the Library and will be a pilot project with the Digital Library initiative at Duke.
Henri Gavin and John Dolbow Civil and Environmental Engineering	WEAVE: Web-based Educational Framework for Analysis, Visualization and Experimentation	$23,500	Develop a web-based instructional framework for synchronous, interactive visualization of remotely controlled experiments. Continuing funding requested from NSF.
Elwyn Simons Biological Anthropology	Paleoprimatological Digital Teaching Library	$18,302	Build a digital archive of an extensive fossil collection so it may be made broadly available for teaching and research. Continuing funding requested from NSF.

Examples of innovative projects at other schools

Digital Chem 1A Project, University of California, Berkeley

http://www.cchem.berkeley.edu/~chem1a/digitalchem1a/

The Digital Chem 1A Project aims to improve the teaching and the cost-effectiveness of U.C. Berkeley's General Chemistry 1A course and to accommodate an increasing number of students, through a series of technological enhancements.

Hell's Kitchen South project, Columbia University

http://www.ccnmtl.columbia.edu/projects/mmt/hks/

The Hell's Kitchen South Project is a study in urban planning with the city grid standing in as the foundation of the study environment. The project includes detailed maps and photographs of the neighborhood; texts related to the social, historical and architectural development of Hell's Kitchen; and links to related projects in urban research, block analysis, zoning, among others.

Biology Labs Online, Cal State University

http://www.cdl.edu/html/biology.html

The purpose of Biology Labs On-line is to create distributed learning environments where students use the World Wide Web and other relevant technology to enrich their learning opportunities, choose when and how long they will spend on a topic, and make choices that match their individual learning styles. Currently the developers are creating interactive, on-line, laboratory activities for non-major introductory biology students.

Seeing Drawing, the London Institute and associated colleges

www.seeingdrawing.com

This project aims to develop students' visual literacy through computer based technology and in so doing provide an innovative teaching tool for teachers of Art and Design and communication. The DVD enables students to develop as independent learners while also providing an innovative and cost-effective teaching aid to support instructors.

Virtual Spectrometry lab, Carnegie Mellon and University of Pittsburgh

http://mass-spec.chem.cmu.edu/vmsl/default.htm

This project is developing an interactive internet educational tool used to teach mass spectrometry and "real-life" problem solving and is funded through an NSF Course, Curriculum and Laboratory Improvement grant.

Pew Grant funded projects – multiple subjects

http://www.center.rpi.edu/PewGrant.html

Gateway to descriptions of 30 projects focusing on "transformative" course re-design, especially courses that affect large numbers of students. Projects cover many different subject areas and technology approaches and emphasize evaluation of results.

E-Biome, Columbia University

http://www.columbia.edu/itc/cerc/seeu/index.html

E-Biome is a student-driven resource that spans both space and time. A Geographic Information System (GIS) tool developed for the Summer Ecosystem Experience for Undergraduates (SEE-U) program, e-Biome enables students to collect ecological data in the field, which they enter in a Web-based database and query to engage in advanced, spatially-oriented investigations. Because the field research is performed with global positioning system (GPS) devices, the data has a very accurate spatial component.

Liberty, Equality, Fraternity: Exploring the French Revolution

http://chnm.gmu.edu/revolution/about.html

This website is an accessible and lively introduction to the French Revolution as well as an extraordinary archive of some of the most important documentary evidence from the Revolution, including 338 texts, 245 images, and a number of maps and songs. The site itself is a collaboration of the Center for History and New Media (George Mason University) and the American Social History Project (City University of New York), supported by grants from the Florence Gould Foundation and the National Endowment for the Humanities.

Heart Simulator

http://www.ccnmtl.columbia.edu/projects/listing/heart/background.html

This Java-based online heart simulator serves as a model of a mathematically-based science simulation and is the first of many body system simulators. It is being used to augment class presentations and provide exercises and experiments for first-year medical students to try independently online. In addition, advanced students and researchers can use the tool to design and run their own experiments.

Perseus Project, Tufts University

http://www.perseus.tufts.edu/

The Perseus Classics collection contains extensive and diverse resources including primary and secondary texts, site plans, digital images, and maps. Art and archaeology catalogs document a wide range of objects: over 1,500 vases, over 1,800 sculptures and sculptural groups, over 1,200 coins, hundreds of buildings from nearly 100 sites and over 100 gems. Catalog entries are linked to tens of thousands of images, many in high resolution, and have been produced in collaboration with many museums, institutions and scholars. Catalog information and keywords have been taken from standard sources, which are cited in the entries for each object.