Provost’s Learning Innovations Grant for Faculty
Special Request for Proposal
Course Development
2009-2010

Please hand-deliver your completed grant proposal (cover page, 4 pages, plus attachments),
the original plus 15 copies, to:
Susan DeWoody, 1530 Wallace (Bldg 5)
by 4:30 p.m.
Friday, May 1, 2009.
No hand written proposals will be accepted.
Notification of awards will be made by Friday, May 29, 2009.

Project Title: Developing Interdisciplinary Campus Sustainability Projects for use in the
Greening of RIT (1055-300) and other Existing RIT Courses and Projects

Applicant(s):

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Developing Interdisciplinary Campus Sustainability Projects for use in the Greening of RIT (1055-300) and other Existing RIT Courses and Projects

Summary

The purpose of this grant to engage one or two students over the summer to work with faculty, staff, and administrators involved with campus sustainability issues to develop projects that can be used as interdisciplinary class projects to promote environmental literacy. The role of the student researcher(s) is critical in this initiative, as they will be helping to establish student representation on the teams addressing campus sustainability issues. A list of potential projects follows, pulled from a list generated by faculty and students involved with the Greening of RIT this year, but it is expected that additional projects will be designed as a result of this research.

Part of the development of these projects will be creating a list of courses, by college and quarter, that address environmental issues and sustainability and which might be promising candidates for incorporating these projects, either completely or in collaboration with another course. Additionally, the student(s) will compile project specific supporting materials and help faculty and staff establish teaching and learning support networks.

- Creating a Green Master Plan for RIT
- Assessing/implementing the RIT Transport Plan
- Designing a Green Dorm (conceptual and architectural design)
- Designing and building inexpensive barrel composters (target audience is Brighton, linking to the GreenBrighton Taskforce)
- Composting and vermiculture
- Planning an ecological restoration of Red Creek (our campus waterway)
- Conducting a thermal heat loss analysis
- Improving recycling at RIT
- Community/Sensory Gardens at RIT - this could include window box kits for the campus dorms and apartments - City of Rochester is experimenting with these
- A possible joint project between the School of American Crafts and the College of Business to produce enough handmade mugs for the incoming class of 2010.
- A 350 Display and Event (350 ppm is the CO2 level scientists are promoting as the target value to control global warming – see www.350.org).
- Residential (and RIT) Green Energy Options (Wind at an additional $0.025 per kw/hr vs. Renewable Blend at an additional $0.01 per kw/hr) – worth it, or would RIT be better off donating to a carbon offset or investing in technology?

Target Learners/Population

This proposal seeks to involve anyone in the RIT community interested in or working on campus environmental and sustainability issues. I will certainly be using these projects in my Greening of RIT course, which attracts students from a variety of majors and colleges and involves a number of RIT faculty and staff as guest lecturers and project advisors/consultants.

Numbers Impacted

Estimating the number of impacted people is difficult. My class is currently limited to 20 students, with 10 RIT faculty and staff linked in as experts in certain areas of campus operations. The projects my students have run in the past typically involve teams of 3-5 students, averaging four projects per class. I would expect the development of at least 10 projects over the summer, so the number of directly impacted students could be estimated at 20-50. I would estimate that each project would involve 2-5 students in other courses as well.
But the projects are designed to benefit RIT in general, or specific parts of RIT’s operations. Past student projects include developing environmental curriculum for FYE, designing materials for bulletin boards for the residence halls, and creating sustainable guidelines for RAs. So the impacts of the projects beyond the classroom will include many more people if the projects are successful.

Project Rational

Ultimately, I see these projects as part of a drive to infuse environmental literacy into the RIT curriculum, which in turn will help our society adopt more sustainable practices. Courses could be designed around a project, like Designing a Green Dorm, or used as a small component of a course, such as spending a class reviewing the 350.org website and discussing the short video on global climate change as part of the national teach-in on global warming, which happens each February.

I believe it is critically important to involve students in the development of campus sustainability projects, since the successful implementation of a project will certainly hinge on student buy-in and participation. I want them to take ownership of a campus problem as stakeholders, rather than consultants, because this will help them work on problems when they become members of a community beyond RIT.

Hiring a student (or two) to flesh out projects is also important in order to maintain a balance of perspectives, help ensure that the projects will be of interest to students, and to make certain that the focus of the projects meet the operational and implementation needs of the faculty, staff, and administrators also involved.

Linnea Tullson is a second year Environmental Science major and an honors student who took my Greening of RIT course last year. Her group started a pilot vermiculture project, which she has continued this quarter as an honors research project. Linnea was a stellar student in the class and has met many RIT students, staff, and faculty involved in environmental and sustainability work, so she has the beginnings of a network to start with. I will work with her to further develop that network, using the evolving GRIT e-mail list and the Middlemarsh community on MyCourses (Middlemarsh is a list of faculty who have attended FITL sessions on Environmental Literacy and/or who have served on campus environment and sustainability committees). Linnea and I will meet weekly to review the project development progress and to compile support materials, which we will distribute through the Middlemarsh community on MyCourses and possibly through the RITGreen website (http://www.rit.edu/fa/ritgreen/) and the Wallace Library. The $5000 will be used for her summer salary and to provide her with on-campus summer room and board.

Impact on Teaching, Learning, and Student Success

I believe the projects would help faculty integrate environmental issues into their courses by providing them with starter materials they can point students towards and foster collaborations between faculty and the RIT community. The projects would help faculty interested in but new to sustainability jumpstart an environmental literacy initiative. For students, I believe that this proposal would help them see the connections of environmental issues and sustainability to their lifestyles and careers, and would provide them with a means of actively working on solving pressing social problems. The projects would also provide inspiration for them to develop their own sustainable research projects. For staff and administrators, I see these projects as a way of integrating the operations of RIT into the curriculum, which will help build community at RIT.
I have seen firsthand from my previous greening courses the impact that studying local campus issues can have on students’ perception of the environment. Before the class, most had no way of assessing the environmental impact of their lifestyles, nor had they thought much about the impact RIT itself has on the environment, or what RIT has been doing to combat those impacts. The projects students have done to date provide them with an opportunity to apply what they have learned about themselves and RIT towards outreach efforts to educate the broader RIT community.

But these earlier projects were based on ideas that I thought would appeal to students and applied to areas I felt were important, often linked to a charge to a campus environment committee (a survey of student environmental awareness and perspectives towards the campus green master plan and a literature survey of what other campuses are doing to become more sustainable). I did not initially approach students about their thoughts on the projects, so I missed their perspective. This past year, I let the students develop their own projects if they did not like what was on the list, and two of the four groups developed their own projects (paper usage on campus and sustainable living guidelines and practices for Global Village. The Global Village project included a proposal to start a second-hand store in the retail, which has since become a college of business group project, developing the business plan for The Attic. That grassroots experience inspired this proposal.

Measuring Project Impact and Sharing Project Results

As part of the proposed project, we will be compiling a list of potential courses and faculty who would be good candidates for campus sustainability projects. We will track who uses the projects and ask faculty to include questions about the campus sustainability projects in their course evaluations. This information needs to be collected as part of RIT’s annual Sustainability Tracking, Assessment & Rating System (STARS) report to the Association for the Advancement of Sustainability in Higher Education (http://www.aashe.org/stars/index.php).

Past projects have been posted on the Honors website (https://honors.rit.edu/student_projects/) and this year’s projects will be posted there this summer. As outlined above, project materials and network/contact lists will be posted to the MyCourses Middlemarsh community and RITGreen websites. We will also explore having the materials and projects available through the Wallace Library. I have led several Environmental Literacy sessions at FITL and would be happy to lead another, highlighting the results of this proposal. Additionally, I plan to submit articles to AASHE’s Resource Center highlighting success stories.

Project Timetable

The project would take place over the summer, with materials ready for Fall courses. Each week I will meet with the student(s) to go over the campus sustainability projects materials, evaluate the development of the campus sustainability projects, and update networking databases and contact lists. As projects are completed, faculty and students will submit them to Middlemarsh and other RIT websites. Final project results will be presented at FITL and possible the annual AASHE conference.