

CURRICULUM

SustainUVa_Sustainability App

Global Sustainability, Spring 2013 Prof. Phoebe Crisman Workshop Leader: David Tucker Team members: Abrahim Abu Khadra, Story Hinckley, Kelly MacDonald, Valeria Riveria

TABLE OF CONTENTS

Abstract

Introduction

Body

Conclusion

Future Work

Lessons Learned

Appendices

ABSTRACT

There is a great deal of interest in sustainability at UVa, but there has been little consolidation of sustainability information that is accessible to students. All of the sustainability groups are decentralized, and information is difficult to access. The goal of the SustainUVa app is to aggregate the sustainability information at UVa in order to make it more accessible to students. The app will create a convenient, user-friendly, and up-to-date platform for the UVa community to find sustainability-related events, groups, and information. This will increase sustainability engagement and education, thereby improving the UVa sustainability curriculum.

The two specific goals for the SustainUVa app are as follows:

1) Increase general sustainability literacy to improve UVA's STARS rating. This goal is to be accomplished by using the app as a platform to increase sustainability knowledge at UVa. This will be accomplished by including "fun facts", whether they are general or UVa-specific (i.e. info about on-grounds recycling initiatives). The app will also increase the STARS rating by connecting students to sustainability events and opportunities on grounds, allowing greater involvement and improving their individual literacy.

2) Concentrate sustainability opportunities at UVA in one convenient app in order to increase sustainability engagement and education. Because there are so many sustainability-related groups on grounds, it is important for all of their information to be centralized in one place. Sustainaunity has attempted this, but their website is not updated frequently. Additionally, an app is a much more accessible and interactive platform. This increased involvement and concentration of information would allow sustainability literacy and engagement to be improved at UVa.

Because the SustainUVa app is meant to be an aggregation of all the sustainability groups, events, and information at UVa, we have contacted all of the sustainability-related groups on grounds. We have made the necessary connections to update the app with the most current sustainability events and information in the UVa community.

In order to ensure the project's continual maintenance and further development, we have established a partnership with the Student Council Environmental Sustainability Committee. Kelly will be a member of the committee next year, and Ibrahim and Story will be working closely with the committee to continue the project (Valeria is graduating). Student Council is also interested in creating a centralized hub for sustainability and were very enthused about our project.

All of the information for the tabs on the app has been compiled. This includes information such as lists of sustainability-related majors, classes, and UVa sustainability events.

We have conducted research on creating the app and have deemed app development companies to be too expensive of an option. Instead, we are going to open our project up to interested Computer Science students in the fall and will be offering them compensation. In order to compensate the student developers, we are applying to the GIFT grant for funding.

The SustainUVa app will create a centralized, up-to-date platform for sustainability-related events, information, and groups that will increase the sustainability engagement and education of the UVa community.

INTRODUCTION

There are many sustainability groups at UVa, but they are extremely decentralized and information is difficult to access. Sustainaunity has attempted to address this problem by creating a website that aggregates sustainability info, but it is rarely updated. The goal of the SustainUVa project is to create an app that will solve this problem and increase engagement by making an interactive, fun platform.

We are in the process of developing an App for smartphones. We envision it as a hybrid between Twitter+Apps. Twitter, also referenced as a the SMS of the internet, is an online social networking service that enables its users to send and read textbased messages of up to 140 characters, known as "tweets." Since its launch, Twitter has been ranked as one of the top ten most visited websites on the Internet -- throughout the year 2012, there was an average of 340 million tweets a day -- a lot of tweets!

Why is this related to our topic? Twitter has become one of the most efficient communication-based opportunities available right now. Tweeters can "tweet" about any topic they desire. Popular Tweeters include Political figures, Celebrities, Comedians, Brands, Companies -- basically anyone who has something important to say. In other words, someone who has a strong influence on mass audiences. Bottom line -- Twitter is another

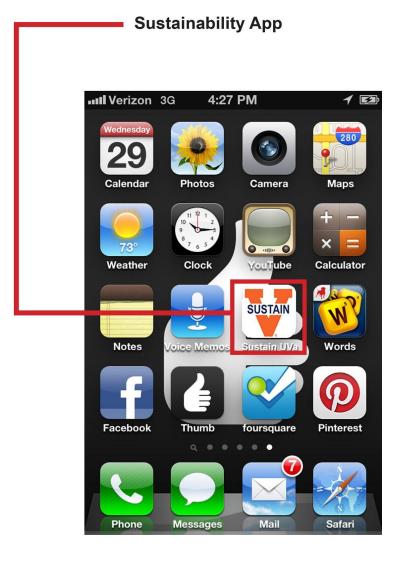


social networking service that enables its users to understand what is happening in the world. We want Sustainability to be a part of this.

The Twitter part of the SustainUVa app will consist of sustainability "fun facts", such as how much energy one wastes when they leave the lights on. Other tweets will also be about current UVa sustainability events, such as a recycling volunteer day. This would create a constant stream of facts and information, making the SustainUVa app a fun, informative, and interactive platform for sustainability information.

Apart from the Twitter component, the rest of the app will include the following information in different tabs:

- Sustainability-related classes offered each semester
- Sustainability-related majors/minors
- List of sustainability-related professors and contact info
- List of environmental/sustainability-related groups at UVA, blurb about them/what they do, and their contact info
- UVA Sustainability events- lectures, special events, volunteer trips
- Charlottesville sustainability-related events



BODY

Partnership with Student Council

Maintaining the app is not an easy job, especially outside the parameters of this class. In order to have a functioning and helpful app, there needs to be some sort of committee to oversee the inner workings of the app and define its vision as it develops. Although we had a number of viable partnership options in the initial stages of the project, we decided it was best to do so with Student Council when they expressed interest. Our contact with Student Council is Holly Mayton, Chair of the Sustainability Committee, and Kelly will also be joining the committee next semester. This partnership would be of use for a variety of reasons. Student Council can get SustainUVA on the map through their contacts in the UVA administration as well as the ease of which they can mass-communicate with the student body. Also, in such a large group we would be exposed to a variety of different opinions on the app that we may have not thought of, while maintaining an intimate environment of a smaller committee. Finally, the existing structure of Student Council committees are taken seriously.

Information included in the App

The SustainUVa app requires submissions from the various sustainability groups on grounds, so we need contacts in these groups to submit whatever information (e.g. events, volunteer opportunities, etc.) they want to be included in the app. This requires us to development a contact base. We have contacted various sustainability groups on grounds to see if they want to contribute to the app and if so, to collect their contact information, and we have had some success so far. As of now, we have the following contacts in sustainability organizations that expressed interest in working with us:

- Green Grounds— Alessandra Macasaet (alm3ks@virginia.edu)
- Environmental Sustainability Organization— Melissa Reardon mer4nd@virginia.edu & Laura Nicole Edelman Ine7md@virginia.edu
- Community Garden— (uvacommunitygarden@gmail.com) + Sarah Marie Steely sms2wx@virginia.edu
- UVA Dining— Chris Stevens(<u>cs4qs@virginia.edu</u>)
- Slow Food— (slowfoodatuva@gmail.com) Polina Oganesyan pvo4pd@virginia.edu

We thought it would be useful to compile some information to have under the list of tabs mentioned earlier in the introduction so that once we have a contract agreement with an app developer, we would have everything ready. The information is listed below will explain the actual information that will be on the app, the contacts needed to update the app, and the frequency with which these tabs will be updated. The information is listed under the tabs below:

Sustainability-related majors/minors

Global Sustainability

- Offers minor only
- Housed in the School of Architecture, but open to all students
- The interdisciplinary Minor in Global Sustainability benefits students of all majors across the University who want to understand the many facets of sustainability and learn how to apply this knowledge to their daily lives. The Minor empowers students across disciplines in common efforts to accomplish real change through community engagement with sustainable projects in their communities and beyond. The Minor also establishes connections between different disciplines and prepares students to incorporate sustainable practices into their varied future careers.
- Apply fall or spring semester. See website for application due dates.
- Contact: Director- Phoebe Crisman (crisman@virginia.edu) or Cypress Walker (ctw9x@virginia.edu) with questions
- Check out website for more info: <u>http://www.arch.virginia.edu/academics/sustainabilityminor</u>

Environmental Sciences

- Offers BS, BA, and minor
- Housed in the College of Arts and Sciences
- Environmental Sciences is an interdisciplinary field concerned with the interaction of processes that shape our natural environment. The Department of Environmental Sciences conducts research and offers instruction in the areas of Ecology, Geosciences, Hydrology, and Atmospheric Sciences.
- Contact: Directors of Undergraduate Programs- Aaron Mills (amills@virginia.edu) or Janet Herman (jsh5w@virginia.edu)
- Website: http://www.evsc.virginia.edu/undergraduate-programs/the-major/

Urban & Environmental Planning

- Offers major & minor
- Housed in the School of Architecture
- The Program in Urban and Environmental Planning balances the development of professional planning skills with a liberal arts education emphasizing interdisciplinary study. Our graduates work in the public, private, and non-profit sectors.
- Planning is a systematic, creative way to influence the future of neighborhoods, cities, and rural areas. A planning degree is for students who want to serve communities facing social, economic, environmental, and cultural challenges by working with residents to:
 - Enhance a sustainable quality of life;
 - Protect the natural environment;
 - Preserve historic buildings and landscapes;
 - Promote social justice for disadvantaged groups; and
 - Deal effectively with population growth or decline
- Contact: Chair of the Department- Tim Beatley (<u>tb6d@virginia.edu</u>)
- Website: http://www.arch.virginia.edu/academics/disciplines/planning

Environmental Thought & Practice

- Offers major only
- Housed in College of Arts & Sciences
- The major is designed for students with a strong interest in the theory and practice of environmental issues. The program will provide students with a background for continued study in graduate or professional schools or careers in business, government, NGOs, or advocacy groups.
- The objective of the Environmental Thought & Practice Program is to produce students who can:
 - Comprehend and think critically about scientific information, economic analysis, and the various ethical constructs that enter into environmental decisions
 - Appreciate how political and social context, historical events, and cultural expectations shape the way we perceive and solve environmental problems.
- Apply spring semester of 2nd year.
- Contact: Director- Vivian Thomsen (vet4y@virginia.edu)
- Website: http://www.virginia.edu/etp/index.html

Specialization in Environmental and Biological Conservation

- For BA or BS students in Biology or Environmental Sciences to specialize within their majors
- Offered by the Biology and Environmental Science departments (CLAS)
- The specialization requires classes related to biological diversity, environmental diversity, conservation techniques, and fieldwork.
- Contact faculty in respective departments for more information.
- Websites: http://dept.biology.virginia.edu/ebc/ & http://www.evsc.virginia.edu/undergraduateprograms/specialization-in-environmental-and-biological-conservation/

Civil & Environmental Engineering

- Housed in School of Engineering & Applied Sciences
- CEE applies science and technology to the planning, design, analysis, construction, operation and maintenance of infrastructure and the natural environment.
- Our focus is on two program areas: environmental and water resources engineering and civil infrastructure systems. Within civil infrastructure systems, students specialize in transportation and structural engineering, solid mechanics or pavement engineering.
- Contact: <u>civil@virginia.edu</u>
- Website: http://ce.virginia.edu/

Contacts:

Contacts are listed for each major. This tab does not require contacting others for more information.

Frequency of Tab Update:

This tab will only need to be updated yearly. Majors do not frequently change, so the information that may need to be changed is the contact information or websites for the departments.

List of sustainability-related professors and contact info

[office hours for each professor will be updated at the beginning of the semester]

Bob Swap [rjs8g] Research Professor- Department of Environmental Sciences PO Box 400123 Department of Environmental Sciences Clark (434) 924 7714

Vivian Thomson [vet4y] Associate Professor- Department of Environmental Sciences Director of Environmental Thought and Practice major PO Box 400123 Department of Environmental Sciences Clark (434) 924 3964

Tim Beatley [tb6d] Teresa Heinz Professor of Sustainable Communities- Department of Urban and Environmental Planning PO Box 400122 Campbell Hall (434) 924 6457

Phoebe Crisman [pc4v] Associate Professor of Architecture- Department of Architecture PO Box 400122 Campbell Hall (434) 924 1006

Paxton Marshall [ppm5y] Professor- Department of Electrical and Computer Engineering PO Box 400743 351 McCormick Rd Room C 321 (434) 243 4986

Andrew Greene [ajg5k] Sustainability Planner for the University Office of the University Architect PO Box 400304 (434) 243 7753

Contact Information: The professors above can be contacted should their information change.

Frequency of Tab Update: The sustainability-related professors can be updated each semester.

List of environmental/sustainability-related groups at UVA

Include a blurb about them/what they do, and their contact info

Information for tab:

This tab will consist of updates for sustainability related events going on at UVA. This may consist of events, lectures, volunteer trips, applications, etc. The various environmental/sustainability-related groups at UVA will give this information. Because of the nature of this tab, there is no actual information to input to it now.

Contacts:

Environmental Science Organization

- Melissa Reardon mer4nd@virginia.edu & Laura Edelman Ine7md@virginia.edu Community Garden
- sms2wx@virginia.edu & uvacommunitygarden@gmail.com

UVA Dining

- Chris Stevens, Stevens-Christopher@aramark.com
- UVA Sustainability
 - Holly Mayton, hmm7cs@virginia.edu

Green Grounds

• Alessandra Macasaet, alm3ks@virginia.edu

Environmental Sustainability Student Council Committee

Holly Mayton, hmm7cs@virginia.edu & Jonathan Torre, jtt7ub@virginia.edu

- GIFT [Green Initiatives Funding Tomorrow]
 - Bonnie Pascal, bnp6bf@virginia.edu & Story Hinckley, sah4yj@virginia.edu

Frequency of Tab Update:

This tab will be updated on a weekly basis. Submissions will be due to a central administrator every Sunday, when the app's "Events" tab will be updated.

Sustainability classes offered each semester:

Course Number	Course Name	Professor	Credits	Department
ARCH 4010	Design Studio	Multiple Instructors		Architecture
ARCH 5500	Special Topics in Architecture: Urgent Matter – Water	Andrew McDowell	1 to 6	Architecture
ARCH 5590	reCOVER Research & Development	Anselmo Canfora	1 to 3	Architecture
ARCH 5590	Maximum Minimum House	Charles Menefee	1 to 3	Architecture
BIOL 4100	Management of Forest Ecosystems	Herman Shugart	3	Biology
CE 4500	Special Topics in Civil Engineering: Public Transportation	John Miller	1 to 3	Civil Engineering
ENGR 4010	Multidisciplinary Design and Development: Part I	Dana Elzey	3	Engineering
ENGR 4595	Solar Car/RideForward	George Cahen	1 to 3	Engineering Urban and Environment
PLAC 5240	Collaborative Planning for Sustainability	Frank Dukes	3	Planning
PLAC 5800	Green Lands	Karen Firehock	3	Planning/Landscape Architecture Systems &
SYS 6070	Environmental Systems Processes	Garrick Louis	3	Information Engineerin
ANTH 2190	Desire and World Economics	George Mentore	3	Anthropology
CE 2050	Introduction to Green Engineering			
CE 2000		Andres Clarens	3	Civil Engineering
COMM 4821	Managing Sustainable Development	Robert Brown	3	Commerce
ECON 4430	Environmental Economics	William Shobe	3	Economics
PLAN 1030	Introduction to Urban and Environmental Planning	Tim Beatley	3	Urban and Environment Planning
PLAN 3060	Law, Land, and the Environment	Staff	3	Urban and Environment Planning
ARCH 3230	Systems, Sites, and Buildings	William Sherman	3	Architecture
CE 4210	Stormwater Management	Teresa Culver, Ray Smith	3	Architecture
EVSC 1010	Introduction to Environmental Sciences	Linda Blum	3	Environmental Science

EVSC 1080	Resources and the Environment	James Galloway	3	Environmental Science
EVSC 2010	Materials That Shape Civilizations	Gary Shiflet	3	Environmental Science
EVSC 2220	Conservation Ecology: Biodiversity and Beyond	Deborah Lawrence	3	Environmental Science
EVSC 2900	Beaches, Coasts, and Rivers	Robert Dolan	3	Environmental Science
EVSC 3200	Fundamentals of Ecology	Thomas Smith	3	Environmental Science
EVSC 3810	Earth Processes as Natural Hazards	Thomas Biggs	3	Environmental Sciences
EVSC 4290	Limnology: Inland Water Ecosystems	Michael Pace	3	Environmental Science
PLAN 5620	Sustainability and Adaptive Infrastructure	William Lucy	3	Urban and Environment Planning
ANTH 3130	Disease, Epidemics and Society	John Shepherd	3	Anthropology
ANTH 3155	Anthropology of Everyday American Life	Frederick Damon	3	Anthropology
CE 3100	Water for the World	James Smith	3	Civil Engineering
GDS 3100	Development on the Ground	Staff	3	Global Development Stud
PHIL 3652	Animals and Ethics Science and Technology in a Social and Global Context: Global	Sahar Akhtar	3	Environmental Science
STS 2500	Environmental History	Edmund Russell	3	Science, Technology, & Society
SOC 3470	Sociology of Development	Rae Blumberg	3	Sociology
SOC 4140	Sociology of Consumption	Ekaterina Makarova	3	Sociology

Contacts: This information can be found online and doesn't require contact.

Frequency of Tab Update: This will be updated every semester.

Charlottesville sustainability-related events

This tab will include information on sustainability-related events in the Charlottesville community. Below are examples of events, though they will obviously change with time.

- Farmer's Market Every Saturday from 7AM-12PM. Water St. Parking Garage Downtown
- Transition Potlocks

4th Monday of every month at 6:45pm.

McIntire Room at Central Library, 201 E. Market St. in Charlottesville

Anyone who's interested in Transition is welcome at our monthly potluck gatherings! We normally catch up on the latest Transition happenings around town, have a speaker or film, and then break into small groups for "Open Space" conversations about the evening's topic.

• Green Drinks

Thu, May 9, 6pm – 7pm Brookville Restaurant, 225 Main Street, Charlottesville, VA 22902

Green Drinks is an organic, self-organizing network of folks who think green and/or work in the environmental field. It's a great way of catching up with people you know, for making new contacts, and for spreading the word about Transition Town! More info here: http://www.greendrinks.org/index.php?city=Charlottesville&country=USA

Rivanna Conservation Network Brown Bag Lecture Series

Thu, May 16, 12pm – 1pm Jefferson-Madison Regional Library

Rivanna Conservation Network's Brown Bag Lecture Series Bring your lunch Date: The Third Thursday of each month Time: 12:00pm to 1pm Location: Jefferson-Madison Regional Library 201 E. Market Street Charlottesville, VA 22902 Questions: Email: exec@rivannariver.org or call 434 97 RIVER (434 977 4837)

Contacts:

This information will be found online on various Charlottesville websites.

Frequency of Tab Update:

This will be updated weekly with the UVa sustainability related events tab.

Conclusion

We have gathered contacts for potential Partnerships -- such as Green Grounds, Green Dining, Environmental Sciences Organization, UVa Community Garden, the UVa Sustainability Coordinator, Slow Food, the Student Council Environmental Sustainability Committee and Green Initiatives Funding Tomorrow. The Student Council Environmental Sustainability Committee has agreed to partner with us to continue our project next semester. This partnership with a secondary source will keep the App alive and will ensure the app has continual management. This partnership with Student Council will also provide more funding, attention, and the ability to grow.

Our last major barrier is the actual development of the app, but we have found a solution with the Computer Science department here at UVa. We plan on funding a student through the Computer Science department to develop the app. This will increase sustainability awareness through not only users of our app, but also within the CS department.

So far we have documented our work through proposal write-ups, sketches of the app and it's characteristics, exchanges of e-mails with partners and a completed GIFT grant application [see appendix]. We have compiled all of the background for the app and we are excited to see the developed app this coming fall.

Future Work

Because we have been working hard this semester to meet with contacts and compile information for the app, we are only waiting on a response from the Computer Science department in order to find a student who will be able to launch the app according to the designs and information we provide to him/her. This project will resume in the fall, when we formally submit our GIFT grant application. Upon receiving the GIFT grant, our project can start immediately, being developed during the timeline the Computer Science Department provides us with.

Lessons Learned

App Development and Funding

Through our research, we discovered that app development is extremely expensive when contracted out to private businesses such as Willow Tree Apps. Upon consultation with one of the Willow Tree representatives, we were informed that the app with the features we wanted would cost somewhere from \$15,000- \$30,000. We learned that a private app development company may not be the best route for our project. Thus we looked into asking for volunteer students to develop the app with the information and designs we provide them. However, due to a lack of compensation, it was a challenge to keep interested volunteers motivated and committed to a long-term commitment. Therefore, we decided it would be best to apply to a Green Initiative Funding Tomorrow (GIFT) Grant in order to collect funding and develop a contract with Computer Science student. Through this trial and error, we have found a more cost-effective way to achieve our goal. Additionally, working with the UVa Computer Science Department will increase sustainability's reach to the other departments within the University, further achieving our goal of better sustainability engagement and education.

Management and Partnerships

Over the course of the semester our view on who would eventually manage the app and maintain its inner workings changed quite a bit. Initially we were thinking of forming an independent student group or committee and we would recruit qualified applicants through UVAconnections, an email sent out to students with opportunities around grounds, as well as word of mouth. However that would have been troublesome due to the lack of funding, the difficult process of creating such a committee, and the variable level of interest we might receive, as we are a new group. Thankfully Student Council took a liking to our idea and has agreed to form a partnership with SustainUVA under the Sustainability Committee; Kelly will also be part of that committee next year. Student Council have established connections with the UVA administration, access to funding, and attract motivated students that would be of great help.

Creating Change

We learned that creating change is a slow process. At the beginning of the semester we assumed we would be able to have a developed app to present at the end of class. Once we began to compile events, classes, contacts and sustainability related information for the app, we realized the research aspect alone would be more involved than we had anticipated. After initially contacting all of the green groups on grounds, we recognized that this project is reliant on their participation and response, which was not always in line with our original timeline. Just developing the background for the app was a semester worth of work, and our original timeline was not feasible. However, we are confident that the work we put into the app this spring will come to fruition in the fall. We have laid the necessary groundwork to create an app that has the possibility to connect thousands of students with a sustainable lifestyle.

We also learned that we should have started out using the resources readily available to us at UVa. Instead of taking advantage of our Computer Science Department, we looked into contracting the app out to private app development companies. Not only was this more expensive, but it also did not match with our goal of achieving increased sustainability awareness and engagement on grounds. Partnering with the Computer Science Department to develop the app would increase sustainability education in their department, which was a major goal of the SustainUVa app. We have learned that by using the resources available to us at UVa, we can also further achieve the original goals of the project.

Initially, our goal was to create an App that would make information easy and readily accessed for students. Apps are trendy right now and we wanted Sustainability to be a part of it to. Nevertheless, we realized there was much more behind this. Factoring in all the information that is out there but not actually accessible to all students is a big issue. There are many layers of information behind getting involved and raising awareness of sustainability issues. There is a major gap of communication that is definitely lacking

between Sustainability groups on grounds and students. We want this to change and believe the App would be a great way to culminate most, if not all of the information and ways of getting involved with sustainability at UVa.

Figure 1.1 – Screenshots of E-mails sent to Sustainability groups at UVa.

Kelly MacDonald 🖉		March 28	2013 11:48 A	M
To: alm3ks@virginia.edu		March 20,	Hide Deta	
Cc: Story Hinckley, Valeria Rivera, Ibrahim Abu Khadra		Ir	box - Virginia	1
Global Sustainability Course Proposal: Sustainability App				
	1 Attachment, 711 KB	Save -	Quick Look	
Dear Alessandra,				
We are a group of students from the Global Sustainability course, and our course invo Sustainability and incorporating them into the UVa Curriculum. We are proposing an SI sustainability and its role around grounds – from everything about courses, events, fur usage, etc. Because the app is intended to be an aggregation of the sustainability involvement from all the different sustainability groups. This means that we would love the groups, such as yourselves, sending us information on events you are hosting, lee opportunities etc. If your group is interested in this, please let me know and send the opportunities etc. If your group excited about this.	ustainability App to be n facts, lectures, altern ormation at UVa, it is la e Green Ground's partic adership applications yo	committed atives to re rgely depen ipation! Thi ou have, vo	to cycling, energ dent on s would inclu lunteer	
Our project proposal is attached if you are interested in learning more. We are also op you think!	en to suggestions, so p	olease let us	know what	
Looking forward to your response,				
Kelly MacDonald				
ARCH2150J.pdf (711 KB)				
Alessandra Macasaet		Apr 3	*	
to me				

Dear Kelly,

Sorry for not responding earlier; I seemed to have missed your e-mail!

I will definitely let the rest of Green Grounds know about this!

Best, Ali Macasaet

...

Kel	ly MacDonald	6)		
To:	mer4nd@virginia	a.edu		
Cc:	Story Hinckley,	Valeria Rivera,	Ibrahim Abu	Khadra
Glo	bal Sustainability	Course Proposal:	Sustainabili	ty App

March 28, 2013 11:52 AM Hide Details Inbox - Virginia 3

1 Attachment, 711 KB Save
Quick Look

Dear Melissa,

We are a group of students from the Global Sustainability course, and our course involves working on a project involving issues of Sustainability and incorporating them into the UVa Curriculum. We are proposing an Sustainability App to be committed to sustainability and its role around grounds – from everything about courses, events, fun facts, lectures, alternatives to recycling, energy usage, etc. Because the app is intended to be an aggregation of the sustainability information at UVa, it is largely dependent on involvement from all the different sustainability groups. This means that we would love ESO's participation! This would include the groups, such as yourselves, sending us information on events you are hosting, leadership applications you have, volunteer opportunities etc. If your group is interested in this, please let me know and send the contact information of the person we should communicate with. We are very excited about this.

Our project proposal is attached if you are interested in learning more. We are also open to suggestions, so please let us know what you think!

Looking forward to your response,

Kelly MacDonald

ARCH2150...l.pdf (711 KB)

+	Melissa Reardon <mer4nd@virginia.edu></mer4nd@virginia.edu>	Mar 29 🕁	*	Ŧ	
	to me Hi Kelly, ESO would be happy to help! The people to contact would be me (<u>mer4nd@virginia.edu</u>) and Laura Edelman (<u>Ine7md@virginia.edu</u>). Assuming the two of us get re-elected, we'll be the people to contact for next year (if it continues past this semester). If not, I'll let you know who to contact.				
	Melissa				

Kelly MacDonald 🖉	March 28, 2013 11:56 AM
To: stevens-christopher@aramark.com	Hide Details
Cc: Story Hinckley, Ibrahim Abu Khadra, Valeria Rivera	Inbox - Virginia 🖉
Global Sustainability Course Proposal: Sustainability App	-1-

1 Attachment, 711 KB Save
Quick Look

Dear Chris,

We are a group of students from the Global Sustainability course, and our course involves working on a project involving issues of Sustainability and incorporating them into the UVa Curriculum. We are proposing an Sustainability App to be committed to sustainability and its role around grounds – from everything about courses, events, fun facts, lectures, alternatives to recycling, energy usage, etc. Because the app is intended to be an aggregation of the sustainability information at UVa, it is largely dependent on involvement from all the different sustainability groups. This means that we would love Green Dining's participation! This would include the groups, such as yourselves, sending us information on events you are hosting, leadership applications you have, volunteer opportunities etc. If your group is interested in this, please let me know and send the contact information of the person we should communicate with. We are very excited about this.

Our project proposal is attached if you are interested in learning more. We are also open to suggestions, so please let us know what you think!

Looking forward to your response,

Kelly MacDonald

ARCH2150...l.pdf (711 KB)

Stevens, Christopher T. <Stevens-Christopher@aramark.com>

Mar 28 ☆

Hi Kelly,

to Brent, me 🖃

This seems like a great opportunity to broadcast the sustainability message to the University and it's extended community and we would love the opportunity to assist you in any means that we are able to. That said, our student group "Green Dining", recently came up with a concept for mapping locations that are heavily involved in waste diversion strategies, primarily speaking, the emergence of an expanding composting program across grounds. It would seem that this would complement your projects concept nicely. Assuming this project progresses as planned, would we merely be forwarding information to a system administrator, or is this a feature that we would manage independently? Any insight you can provide would be greatly appreciated and I would very much like the opportunity to meet and discuss particulars if you and your group may have the time to do so. Thank you again for reaching out to Green Dining. Looking forward to hearing back from you...

Sincerely,

Chris.

Christopher Stevens Sustainability Manager University of Virginia Dining Services office: <u>434-924-5864</u> mobile: <u>434-920-5909</u> fax: <u>434-982-4995</u> stevens-christopher@aramark.com

Ashlyn McCurley <aem5ec@virginia.edu>

to Story, Nicole, me, Valeria, Ibrahim 💌

Hi Story,

I love your team's proposal, and I think this could definitely fill a missing gap in UVA's sustainability efforts. This is definitely something Student Council can help you all with, but we are in the process of transitioning committee chairs, so the new chairs will need to make the final call on how to partner with you all on this initiative. I'll give them your proposal and get them in contact with you after we transition this week.

Good luck on the project! It looks great.

Holly Mayton

Apr 16 📩	*		
		*	

2:58 PM (20 hours ago) ☆ 🖌 👻

to me . Hey Kelly!

So good news all around. Jon and I would love to have the Sustainability App become a project/task force of the Student Council Sustainability committee next year, if that works for you all. Secondly, Nina Morris is willing and excited to be faculty adviser for the upcoming GIFT application in support of this project.

Let me know if there's anything else we can do for you right now! As a random thought, Earth Week next week could offer a good opportunity to do some surveying of the people involved in sustainability about any ideas or feedback on the app, if that's something you'd be interested in let me know.

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UVA Garden	Apr 3 📩	*	Ŧ
to me 💌			
Hi Kelly,			
This sounds great! This is a fine email to contact us through, though reaching me at my persona (sms2wx@virginia.edu) might be easier. My name is Sarah Steely, and I am the undergraduate			
Let me know what you need from me!			
Fondly, Sarah			

Figure 1.2 – List of websites that will help with the content of the app

- Sustainability course list
 <u>http://www.virginia.edu/sustainability/courses/</u>
- UVA sustainability "Track our progress" <u>http://www.virginia.edu/sustainability/track-our-progress/</u>
- UVA sustainability related facts
 <u>http://utilities.fm.virginia.edu/sustainability/Pages/Home.aspx</u>
- List of different sustainability groups and contact information
 <u>http://sustainaunity.com/get-involved/</u>
- Applications/ opportunities to get involved
- Information about the global sustainability minor
 <u>http://www.arch.virginia.edu/academics/sustainabilityminor</u>

Figure 1.3: Completed GIFT grant application



University of Virginia Green Initiative Funding Tomorrow

What is G.I.F.T?

G.I.F.T. is a "green" fund at the University of Virginia that's goal is to bolster U.Va.'s commitment to sustainability by funding projects that promote sustainable behavior on Grounds and encourage innovation, leadership, and excellence in fields related to sustainability.

Pre-application Checklist

- Projects must promote environmental sustainability on UVa's campus, or in the capacity that on-campus activities influence sustainability off campus
- Projects must have a clearly-defined, measurable outcome.
- Project proposals may be submitted by UVa students, student organizations, staff, and faculty. Individuals and organizations outside of UVa may not submit proposals.
- Projects shall have received all necessary written approval by appropriate campus officials prior to consideration.
- It is to the discretion of the Grant Allocations Committee whether GIFT funding will support projects already mandated by law. GIFT will seek to fund projects which go above and beyond minimum requirements.
- All projects shall have a mechanism for evaluation and follow-up after funding has been dispersed. At minimum, a project plan must include a report made to the Grant Allocation Committee after successful (or unsuccessful) implementation. If a project is expected to have on-going benefits such as annual cost savings, the project plan must include a mechanism for tracking, recording, and reporting these benefits back to the Grant Allocation Committee on an (at least) annual basis.
- Projects must have student participation.
- Partisan or political advocacy focused project proposals shall not be eligible for funding.

Application:

Project Name: SustainUVa

Project Lead Information: Name: Ibrahim Abu Khadra Title: Group member Phone: Email: Address: Organization/Department:

Name: Story Hinckley Title: Group member Phone: (804) 337 7163 Email: sah4yj@virginia.edu Address: 219 14th St NW Apt 5, Charlottesville VA 22903 Organization/Department: Environmental Thought & Practice

Name: Kelly MacDonald Title: Group member Phone: (609) 240 7524 Email: krm9kd@virginia.edu Address: 461-4 Lambeth Field, Charlottesville VA 22904 Organization/Department: Global Development Studies & Biology

Name: Valeria Rivera Title: Group member Phone: (434) 249 6080 Email: vr3qz@virginia.edu Address: 420 Monroe Ln Apt 12, Charlottesville VA 22903 Organization/Department: Architecture

Faculty/Staff Sponsor: Name: Nina Morris Title: Sustainability Outreach Coordinator Phone: (434) 982 5592 Email: <u>nmm3a@virginia.edu</u> Organization/Department: Facilities Management

I. Detailed Project Description

Concentrate sustainability opportunities at UVA in one convenient app. Because there are so many sustainability-related groups on grounds, it is important for all of their information to be centralized in one place. Sustain unity has attempted this, however, their website is not updated frequently. Additionally, an app is a much more accessible and interactive platform. This increased involvement and concentration of information would allow sustainability literacy and engagement to be improved at UVa.

Because the Sustain UVa app is meant to be an aggregation of all the sustainability groups at UVa, we have been contacting them individually to gauge their interest and get their proper contact information. The Sustain UVa app is predicated on their support and continual submissions (i.e. of events, leadership positions, volunteer opportunities). We have started to hear back from the various groups, which provides us the contact base we need in order to keep the information on the app up-to-date.

We have also contacted the Student Council Environmental Sustainability Committee to see if they are interested in partnering with us, in order to ensure we have someone to take over management of the app once the class ends. We met with Holly Mayton, the current and future chair of the committee, and she was very excited to work with us for the coming year. Thus, we will be able to develop a partnership with them to ensure that the app is managed and further developed beyond this class.

We are in the process of arranging a partnership with the Computer Science Department in order to develop the app and we will then be able to update the app ourselves on a weekly basis.

To date, we have made the contacts necessary to receive submissions, manage the content, and create the Sustain UVa app. We will use these to further develop our project to make the app a reality.

II. Budget and Financing

Full project costs

\$1,000 in order to cover for a contract with the Computer Science Department to launch the app with all the designs and information we provide.

Operation and maintenance costs Include information regarding vendor(s), contractors, etc.

None Return on Investment (if applicable) Educational

Financial Sources

GIFT

Will the student sustainability fund be funding 100% of the project?

Yes

Are there other funding sources available for the project such as grants, ticket sales, etc?

No

Have you researched to see if other sources are available?

No

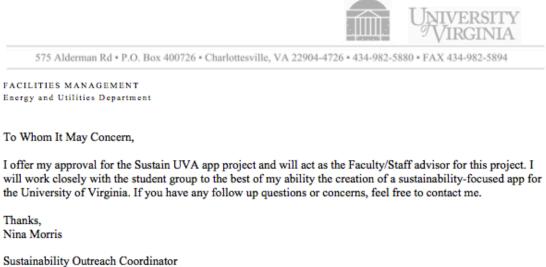
If other funds are available, have you applied for funding?

No

III. Timeline

Once receiving the GIFT grant, our project can start immediately, being developed during the timeline the Computer Science Department provides us with.

IV. Letter from appropriate University contact and sponsor



Sustainability Outreach Coordinate Facilities Management (434)982-5592 <u>Nmm3a@virginia.edu</u>

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