Staffulty:
When Sustainability Staff Perform Faculty Roles

TRACS 2017 Presenter: Richard R. Johnson, Rice University

March 6, 2017

TOP DEFINITION

staffulty

Stupid word used in yearbooks because some[illegible]s are too l[illegible] write "Staff & Faculty".

John - "Let's celebrate staffulty appreciati[illegible]ek!"
Mark - "That's the dumbest word ever an[illegible]ou say it again I will [illegible]p you."

#staff #faculty #staffulty #stafulty #sfafulty

by swaggernaut812 July 30, 2013

Staffulty: Staff who have faculty appointments or who otherwise perform faculty roles

“Staffulty” Class Engagement Census

Staff

Staffulty

Level of Engagement	Number of Participants
Class assist w/o visit (e.g. provide data)	
Class assist with a visit or two (e.g. lecture, tour)	
Prolonged class engagement (e.g. project development/sponsorship)	
Teaching short for-credit courses (e.g. summer study abroad, spring break experience)	
Teaching full semester-long class	

“Staffulty” Non-Class Academic Engagement Census

Level of Engagement	Number of Participants
Letters of Recommendation	
Academic Conference Chair/Co-Chair/Planning	
Research, Academic Grants	
Academic Steering Committees	
Curriculum Proposals	
Faculty Appointment(s)	

Question: How can performing a staffulty role enhance the effectiveness of the sustainability office(r)?

Staffulty Role Enhances Sustainability Office

1. Increases student and faculty awareness of campus greening
   - Tours, lectures
2. Enables structured student and faculty participation in campus greening
   - Directed class projects using campus as a living laboratory
3. Broadens reach and raises visibility of sustainability office
   - Working with students in an academic context is quite different from working with them in an extra-curricular or intern context
4. Creates stakeholders and valuable relationships
   - Faculty who work with you in the classroom will work with you outside the classroom
5. Allows sustainability office to make meaningful contributions to academic and research mission
   - New classes, academic programs, research relationships
6. Opens the door to amazing opportunities…

Structured student participation via class projects

(courses not led by sustainability officer)

Rice University Building Temperature Policy

The following indoor temperature and humidity ranges for occupied spaces shall be maintained on campus:

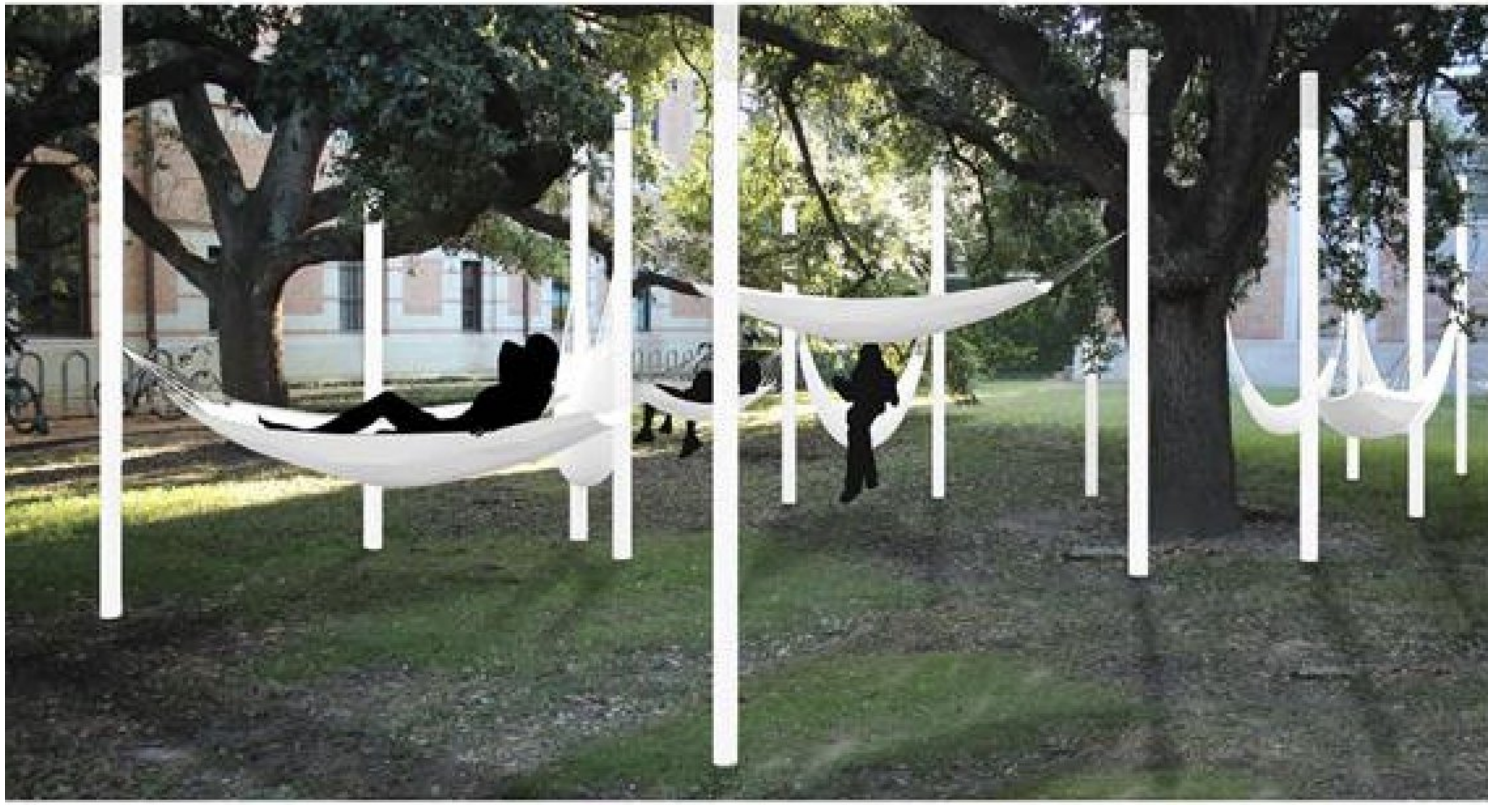
	Temperature Range	Relative Humidity
Air Conditioning	74 – 78 degrees	40% min 65% max
Heating	68 – 72 degrees	40% min 65% max

Certain specialized areas – such as laboratories, library collections, the Data Center, and galleries – are exempt from these guidelines but will be expected to be maintained within recognized efficient ranges for their type of use.

Appropriate nighttime, weekend, and holiday setbacks will be implemented outside of established hours of operation.

Creating Outdoor Study Spaces

YOU'RE INVITED!
OPENING CEREMONY OF *THE HANGOUT*
STUDENT-DESIGNED INSTALLATION AT RICE UNIVERSITY
5-7 PM, THURSDAY, OCTOBER 13 BETWEEN FONDREN AND HUMANITIES



CELEBRATE THE OPENING WITH FOOD, DRINKS, MUSIC & HAMMOCKS
OPEN TO THE PUBLIC, RICE STUDENTS, FACULTY, AND STAFF

Birth of a Pocket Prairie

SEPTEMBER 14, 2015

HARRIS GULLY NATURAL AREA MASTER PLAN

LYNN LOWREY ARBORETUM OF RICE UNIVERISTY

Spring 2017 Scoped Projects (a sampling)

ARCH 322/622 "Case Studies in Sustainability: The Regenerative Repositioning of New or Existing Rice Buildings"

- Improving the pedestrian and cyclist experience
- The Future of Parking and Vehicle Infrastructure
- Applying a net-zero concept to a new faculty masters house
- Greening the architecture school building
- Redesigning barren plazas

CEVE 307/507 "Energy and the Environment"

- What is the best way for Rice to increase renewables in its electricity profile?
- What building-level energy efficiency projects/opportunities are a viable investment to achieve greenhouse gas (GHG) reductions?
- Should Rice create a voluntary student "green power" option for on-campus residents?
- What transportation measures would achieve meaningful reductions in GHGs?
- Should student food service change to reflect the climate impacts of the food served?
- These projects will all be evaluated using a common metric of cost per ton of GHG reduction.

Lessons learned from teaching ~20 classes using campus as a living laboratory for learning about sustainability

(courses led/co-taught by sustainability officer)

ENST 302 / SOCI 304:
Environmental Issues – Rice Into the Future

The 2 Key Assignments are:

- **Group benchmarking report** on a specific campus greening topic across a spectrum of universities
- **Group project** to improve the university's environmental performance in some way

Lesson 1:

Never underestimate the ability of three (or four or five) students to effect real change.

U.S. BUILDINGS IMPACTS ON RESOURCES

39% of total energy consumption

71% of electricity consumption

39% CO_2 emissions

30% of raw materials use

30% of waste output

12% of potable water consumption

Going Green: Rice Commits To Building Energy-Saving, Eco-Friendly Facilities

Rice News, August 24, 2006

Rice LEED Status Update

Project	LEED Rating
Anderson-Clarke Center for Continuing Studies	Gold
Baker College Addition	Silver
Biosciences Research Collaborative (Core and Shell)	Gold
Biosciences Research Collaborative (Commercial Interiors)	Gold
Brockman Hall for Physics	Gold
Duncan College	Gold
Gibbs Recreation Center	Silver
McMurtry College	Gold
Oshman Engineering Design Kitchen	Gold
Rice Children's Campus	Silver
Will Rice College Addition	Silver
Wilson House (LEED for Homes)	Silver

This represents about 20% of our total campus square footage!

Lesson 2:
Access is critical.

Lesson 3:
Trust is also critical.


LOVE
FOOD
HATE
WASTE


MARTEL COLLEGE


RAYZOR HALL
J NEWTON RAYZOR
EUGENIA PORTER RAYZOR
OLD NAVY

Lesson 4:
“Unsuccessful” projects can be successful.

Lesson 5:
Students are resourceful.


BALER
TC-700
MADE IN U.S.A.
P B&J

Lesson 6:
Engage constantly with project teams.

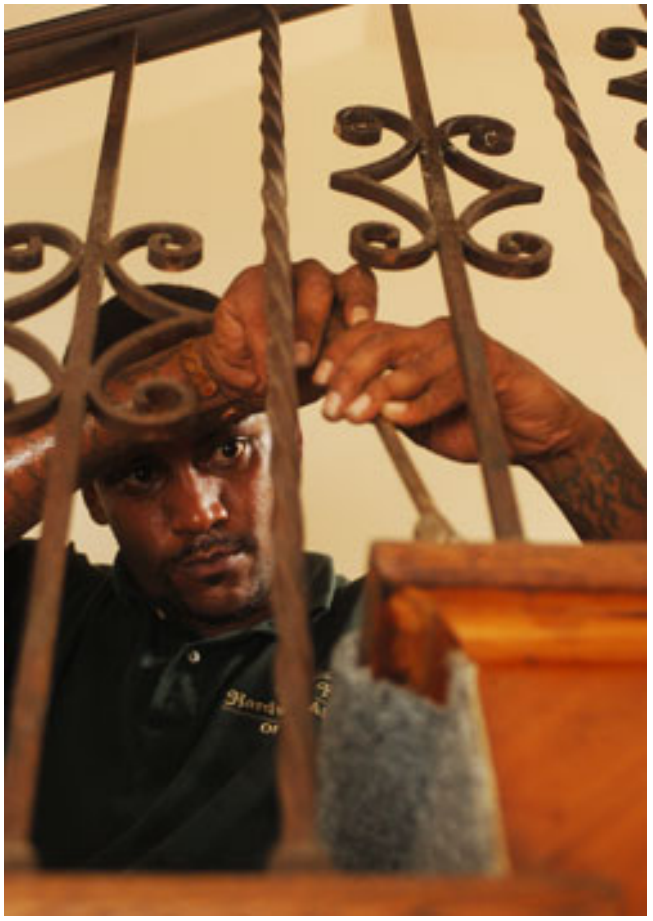
Lesson 7:

Sometimes project momentum is more important than project completion.

Building Deconstruction on Chaucer Street

In the U.S., approximately 35-40% of the solid waste stream consists of construction and demolition waste.

-US Army Corps of Engineers



Rice Children's Campus: Reuse of Bricks

Rice Children's Campus

Lesson 8:
Sometimes the end is not the end
(or is but shouldn’t be).


RICE
BIOE
GSA


RICE
JORKER

RENTAL

BIKE MODEL AND ACCESSORIES | HOW IT WORKS | RENTAL AGREEMENT | FREQUENTLY ASKED QUESTIONS

Interested in renting a bike for the semester? Click here to apply! Applications are due August 22nd by 11:59 pm.

Thank you for your interest in Rice Bikes' Rental program.


2401 Shakespeare St
Houston, Texas
Street View - Aug 2015
Rice Village
Shakespeare St
Dryden Rd
Swift Blvd
Greenbriar
Google

Lesson 9:
Success breeds success.

Farmers' Market

Welcome to the Real Food Revolution's

Farm to Fork Dinner

Special thanks to
Chefs Ed , Kyle and Johnny for helping plan and prepare this dinner
and to
The Center for the Study of Environment and Society and Student Activities President's Programming for helping to fund this event

Appetizers

Zucchini, spinach and oven-dried tomato rolls
from Atkinson Farm

Seasonal greens and arugula with satsuma orange segments, candy cane beets and a honey citrus vinaigrette
from Atkinson Farm & Animal Farm

Apple and goat cheese roulade with rainbow micro greens
from Blue Heron Farms & Bella Verde Farms

Texas quail with a honey cider glaze
from Lockhart, Texas

Entrees

Chicken with potato marquee, sherried mushrooms and green beans
from Oaks of Mamre Farm, Animal Farm & Atkinson Farm

Vegetarian: herb-marinated tofu with potato marquee, sherried mushrooms and green beans
with tofu from Calco of Houston

Dessert

Creme brulee and crea puffs with caramel
from Oaks of Mamre Farm

Cranberry Cous Cous

Stewed Garbanzo Beans

Steamed Cabbage and Peppers

Rice University Farmers Market Special

Vegetarian Gumbo (NO GLUTEN)

Thickened with Roux made from

Quinoa and Brown Rice Flour

(Contains Dairy)

Steamed Brown Rice

Farm-to-Fork-to-Farm Program


MARTEL COLLEGE
green restaurant
ASSOCIATION
dinegreen.com

The 9 Key Lessons (So Far…)

1. Never underestimate the ability of three (or four or five) students to effect real change.
2. Access is critical.
3. Trust is critical.
4. “Unsuccessful” projects can be successful.
5. Students are resourceful.
6. Engage constantly with project teams.
7. Sometimes project momentum is more important than project completion.
8. Sometimes the end is not the end (or is but shouldn’t be).
9. Success breeds success.

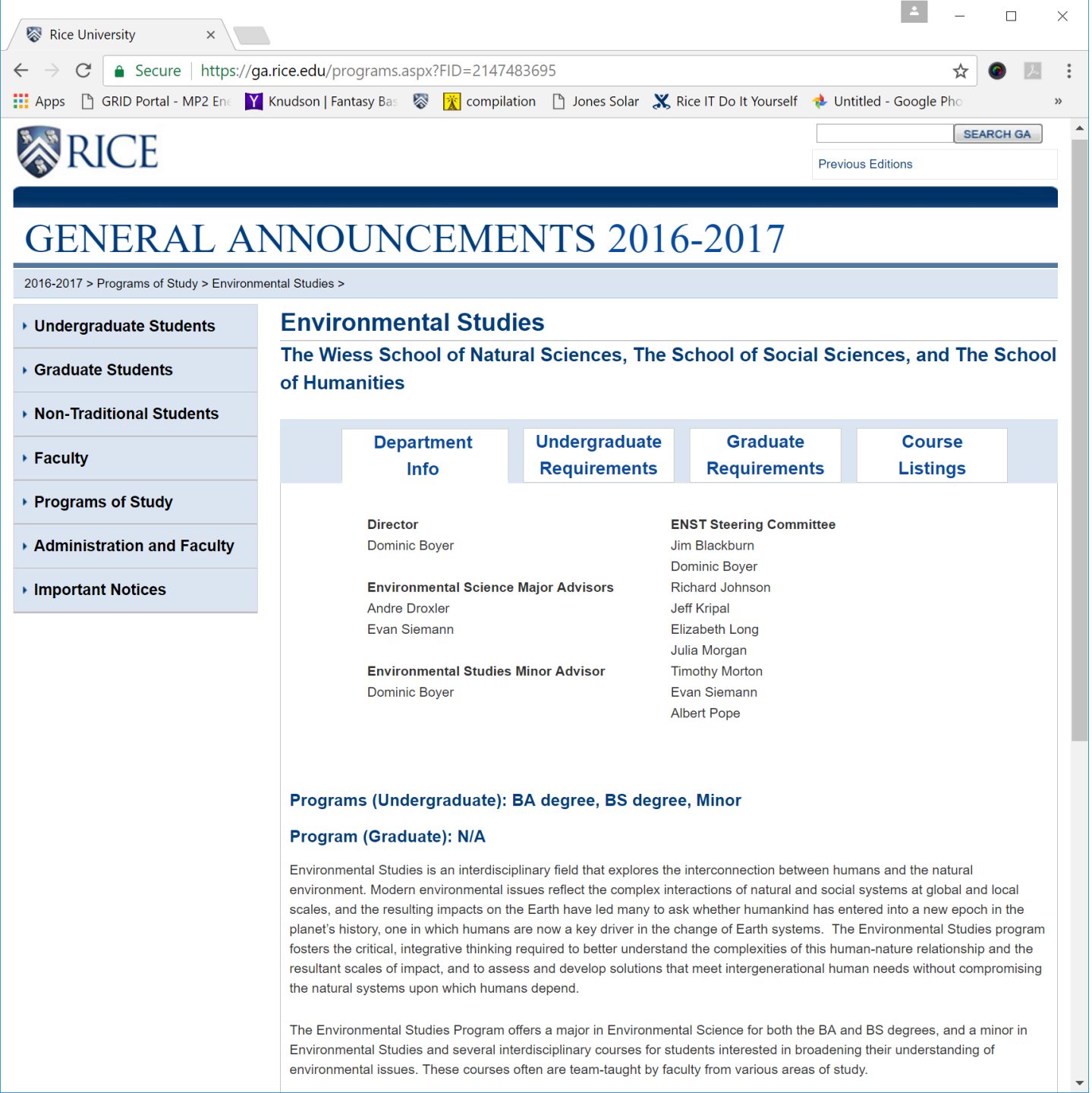
Key Insight:

When the sustainability office leads a class with real on-campus projects and real campus clients, the office is able to achieve considerably more in a semester than if the staff were working on their own.

Further, the students gain real project management experience and become stakeholders in the problem and the outcome.

Contributing to the Academic Mission

Shaping the Curriculum


Rice University

Secure | https://ga.rice.edu/programs.aspx?FID=2147483695

Apps | GRID Portal - MP2 En | Knudson | Fantasy Bas | compilation | Jones Solar | Rice IT Do It Yourself | Untitled - Google Pho

RICE

SEARCH GA

Previous Editions

GENERAL ANNOUNCEMENTS 2016-2017

2016-2017 > Programs of Study > Environmental Studies >

- Undergraduate Students
- Graduate Students
- Non-Traditional Students
- Faculty
- Programs of Study
- Administration and Faculty
- Important Notices

Environmental Studies

The Wiess School of Natural Sciences, The School of Social Sciences, and The School of Humanities

Department Info | Undergraduate Requirements | Graduate Requirements | Course Listings

Director
Dominic Boyer

Environmental Science Major Advisors
Andre Droxler
Evan Siemann

Environmental Studies Minor Advisor
Dominic Boyer

ENST Steering Committee
Jim Blackburn
Dominic Boyer
Richard Johnson
Jeff Kripal
Elizabeth Long
Julia Morgan
Timothy Morton
Evan Siemann
Albert Pope

Programs (Undergraduate): BA degree, BS degree, Minor

Program (Graduate): N/A

Environmental Studies is an interdisciplinary field that explores the interconnection between humans and the natural environment. Modern environmental issues reflect the complex interactions of natural and social systems at global and local scales, and the resulting impacts on the Earth have led many to ask whether humankind has entered into a new epoch in the planet's history, one in which humans are now a key driver in the change of Earth systems. The Environmental Studies program fosters the critical, integrative thinking required to better understand the complexities of this human-nature relationship and the resultant scales of impact, and to assess and develop solutions that meet intergenerational human needs without compromising the natural systems upon which humans depend.

The Environmental Studies Program offers a major in Environmental Science for both the BA and BS degrees, and a minor in Environmental Studies and several interdisciplinary courses for students interested in broadening their understanding of environmental issues. These courses often are team-taught by faculty from various areas of study.

Stay tuned…
more to come!

Amazing Opportunities

Engaging Students in Creating the Future

RICE®

CHALMERS
UNIVERSITY OF TECHNOLOGY

HSB Living Lab, Chalmers University, Sweden
A Research Platform for Sustainable Living

Hon mäts av 2 000 sensorer

På besök i nya huset. Matilda Jerkeman flyttar snart in i HSB Living Lab, där hennes vardag kommer att skärskådas av forskare.

Två veckor före inflyttning återstår en del markarbeten.

Christian Marx visar lokaliseringssensorn, den platta disken, i taket.

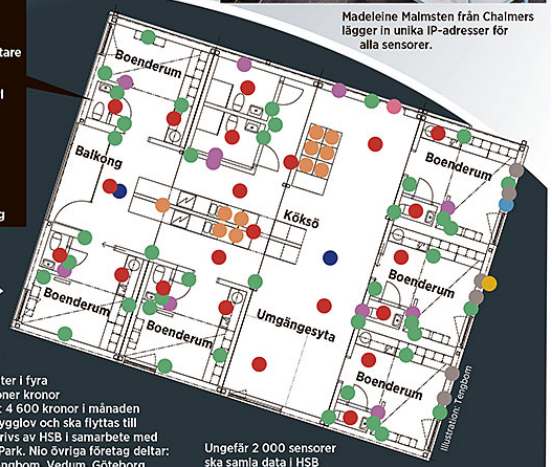
Tvättstugan kommer att finnas direkt innanför ytterdörren. Illustration: Tengbom

Madeleine Malmsten från Chalmers lägger in unika IP-adresser för alla sensorer.

En typ av sensor mäter temperatur och relativ luftfuktighet på tre punkter i ytterväggens genomskärning.

Exempel på sensorer på plan 2

- Visuell sensor och ljudmätare
- Fukt-, temperatur- och koldioxidmätare
- Våg: Mäter vikten som passerar
- Våg: Till exempel i kyl och avfallskärl
- Elmätare i uttag
- Elmätare och internet i takuttag
- Värmeflödesmätare
- Tre mätare för fukt i väggen
- Väderstation: Mäter temperatur, luftfuktighet, vind och solbestrålning



HSB Living Lab

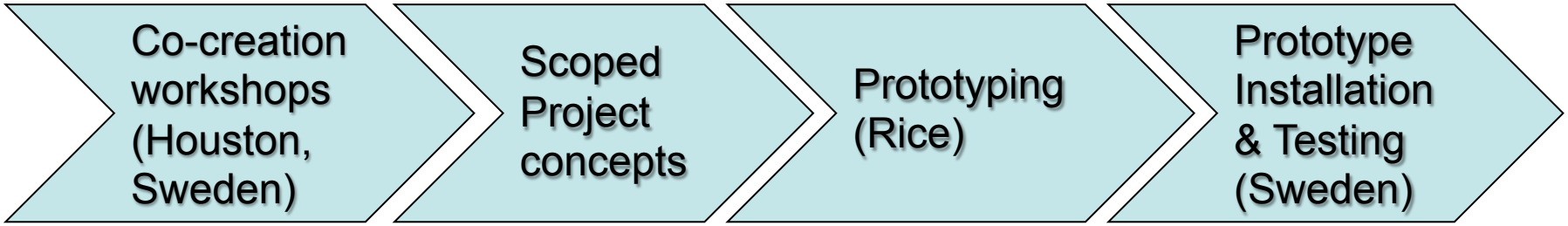
HSB Living Lab består av 29 lägenheter i fyra våningar och kostar ungefär 50 miljoner kronor att bygga. Studenterna betalar drygt 4 600 kronor i månaden i hyra. Byggnaden har ett tillfälligt bygglov och ska flyttas till en annan plats om tio år. Projektet drivs av HSB i samarbete med Chalmers och Johanneberg Science Park. Nio övriga företag deltar: Bengt Dahlgren, Electrolux, Peab, Tengbom, Vedum, Göteborg Energi, Tieto, Akademiska Hus och Elfa.

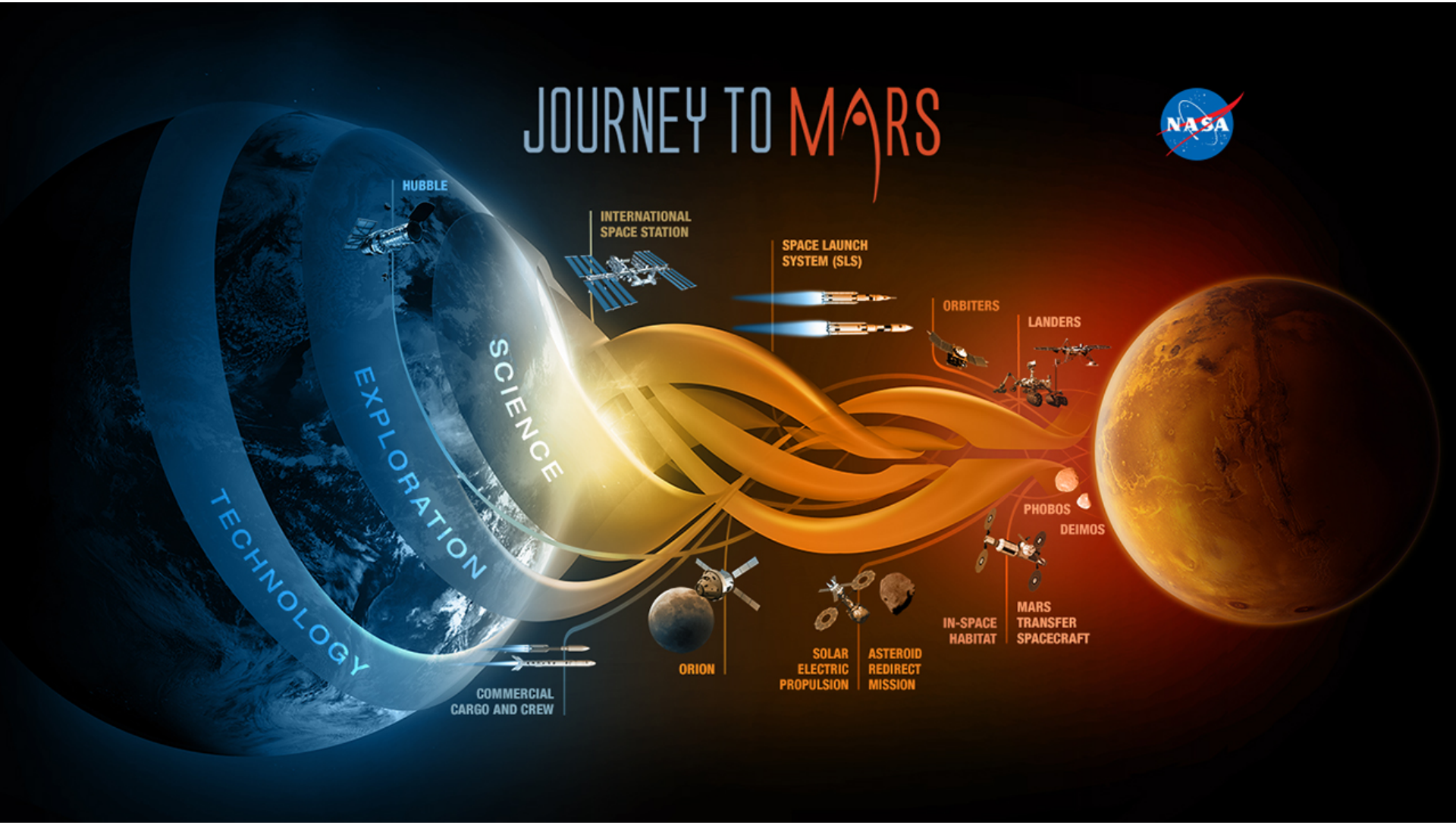
Ungefär 2 000 sensorer ska samla data i HSB Living Lab.

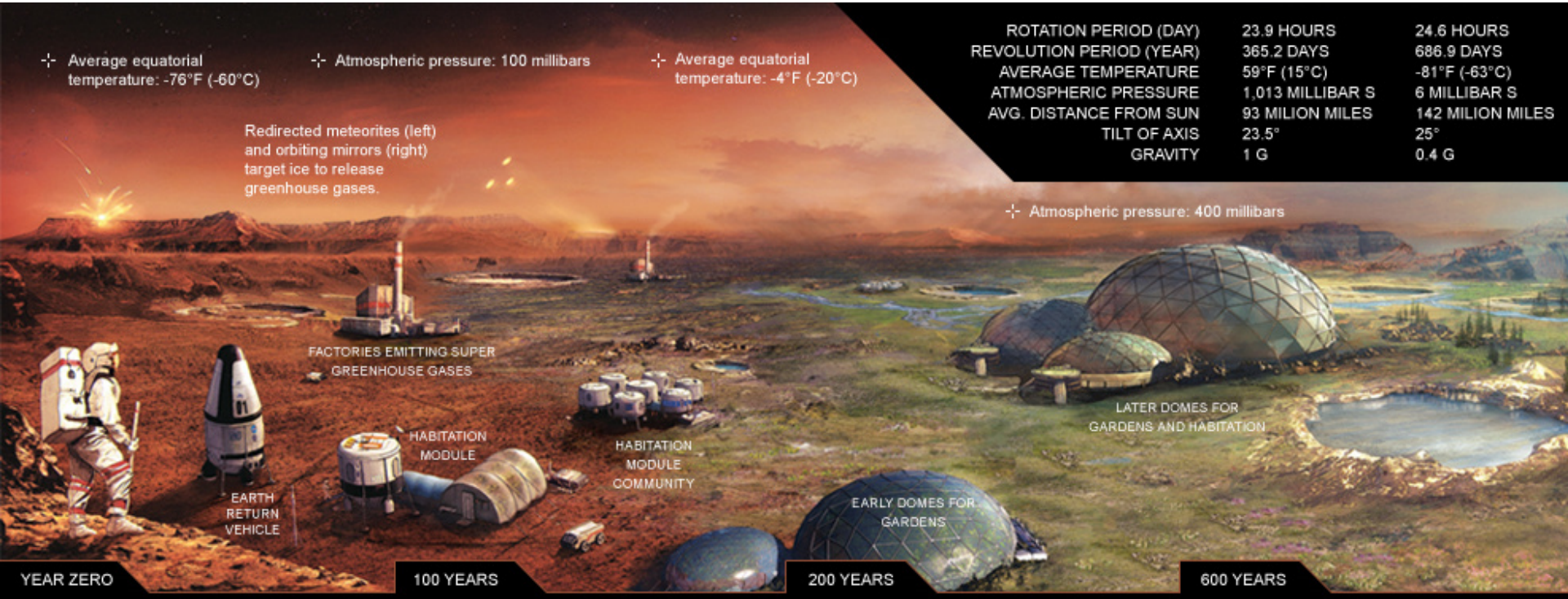
Grafik: Jonas Askergren

Developing a Partnership

Institution	Resources	Needs
Chalmers University of Technology	HSB Living Lab Industry Partners via Living Lab	Projects to implement in HSB Living Lab
NASA – JSC	Mars program Deep subject matter expertise	Teams outside NASA that can develop initial concepts Terrestrial environmental to test technologies
Rice University	Institutional emphasis on experiential learning Program, facilities, and staff to support design projects	Partners/clients for design projects Locations to test/implement design projects Short-term study abroad opportunities for engineers Funding to support travel for project implementation


Co-creation workshops (Houston, Sweden)
Scoped Project concepts
Prototyping (Rice)
Prototype Installation & Testing (Sweden)


JOURNEY TO MARS
NASA
HUBBLE
INTERNATIONAL SPACE STATION
SPACE LAUNCH SYSTEM (SLS)
ORBITERS
LANDERS
SCIENCE
EXPLORATION
TECHNOLOGY
PHOBOS
DEIMOS
ORION
SOLAR ELECTRIC PROPULSION
ASTEROID REDIRECT MISSION
IN-SPACE HABITAT
MARS TRANSFER SPACECRAFT
COMMERCIAL CARGO AND CREW



ROTATION PERIOD (DAY)	23.9 HOURS	24.6 HOURS
REVOLUTION PERIOD (YEAR)	365.2 DAYS	686.9 DAYS
AVERAGE TEMPERATURE	59°F (15°C)	-81°F (-63°C)
ATMOSPHERIC PRESSURE	1,013 MILLIBAR S	6 MILLIBAR S
AVG. DISTANCE FROM SUN	93 MILION MILES	142 MILION MILES
TILT OF AXIS	23.5°	25°
GRAVITY	1 G	0.4 G

1 **THE THOUSAND-YEAR PROJECT** might begin with a series of 18-month survey missions. Each crew making the six-month journey from Earth to Mars would add a small habitation module to the base.

2 **AN ATMOSPHERE** could be made by releasing carbon dioxide now frozen in dirt and polar ice caps. Factories spewing potent greenhouse gases, and maybe space mirrors focusing sunlight on ice, could start the thaw.

3 **RAIN** would fall and water would flow once enough CO_2 had been released to raise the atmospheric pressure and warm the planet above freezing. Microbes, algae, and lichens could start taming the desert rock.

4 **FLOWERING PLANTS** could be introduced after the microbes had created organic soil and added some oxygen to the atmosphere. Boreal and perhaps even temperate forests might ultimately take root.

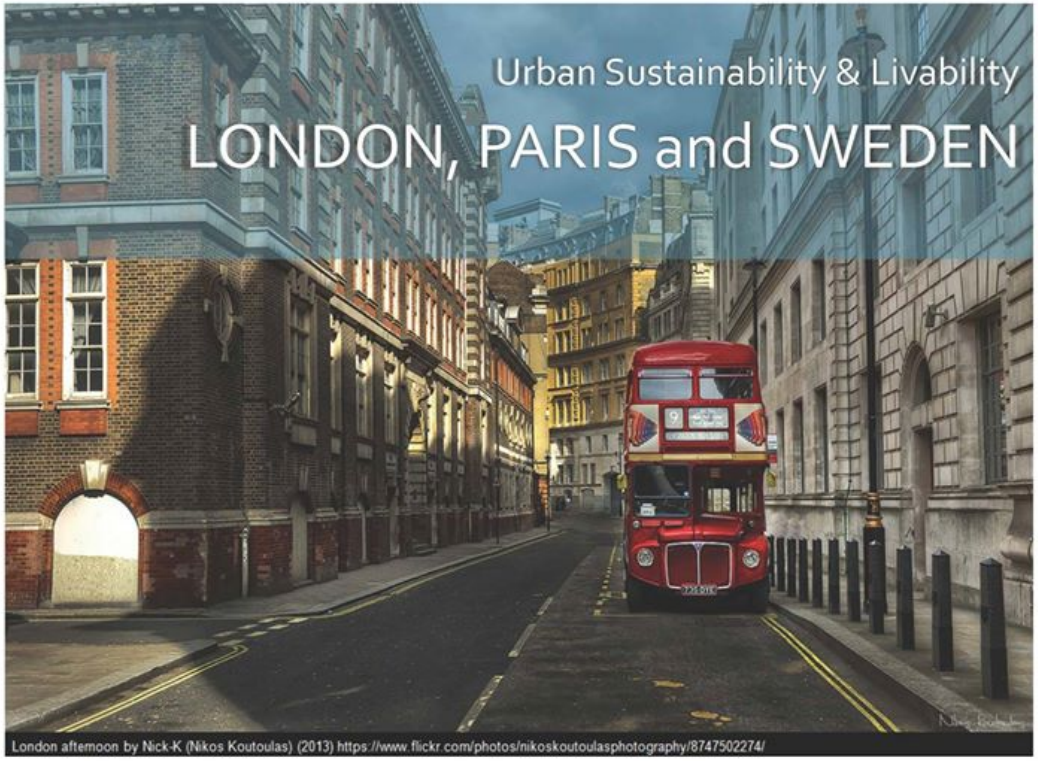
Team Compost-Haste: Rice Senior Design

Team Compost-Haste: Prototyping at Rice

Team Compost-Haste: Installation at HSB Living Lab

Urban Sustainability and Livability Summer Program

Revenue!



London afternoon by Nick-K (Nikos Koutoulas) (2013) https://www.flickr.com/photos/nikoskoutoulasphotography/8747502274/

Rice Summer Institute Faculty-Led Program

May 23 – June 24, 2017

Taught by Prof. Richard Johnson, Director of Sustainability, Professor in the Practice of Environmental Studies in Sociology, and Adjunct Professor in Civil and Environmental Engineering; and Dr. Don Ostdiek, Director of Policy Studies and Associate Dean of Undergraduates

Info session coming soon!

Question: What are the potential challenges associated with sustainability staff performing in a staffulty role?

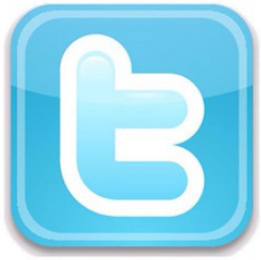
Staffulty Challenges

1. Opportunity cost
   - What are you not doing as a result?
2. Leading a class takes more time than you think! (preparation, grading, class administration)
   - Strategies:
     - Teaching Assistant
     - Co-teaching
     - Limit enrollment
     - “Embedded partnership”
3. Don’t try to be what you’re not
   - If you don’t have a Ph.D., play to your strength and experience as a practitioner
4. Avoid faculty politics and turf wars
5. Time burden
   - Choose your spots, find leverage points, avoid unrelated work
6. Uncompensated labor
7. You won’t have the same status as faculty… so what!

Engage

1. Newsletter: sustainability.rice.edu/newsletter
2. Facebook: /SustainabilityAtRice
3. Twitter: @SustainableRice
4. Instagram: @SustainableRice
5. LinkedIn: Sustainability at Rice University






Questions?

Photo by Jeff Robinson, https://www.flickr.com/photos/43193421@N02/4921409135