UNIVERSAL COURSE ON SUSTAINABILITY

MAGEEP EDUCATION NETWORK

Proposed by

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TARGET

• Undergraduate students

• All disciplines
Campus Sustainability Office

CSO fosters partnerships across departments and disciplines that nourish institutional stewardship of our environment and support a growing culture of sustainability within PSU. We aim to align operations, policies, and planning with University conservation and sustainability goals. CSO values reciprocal communication, striving both to educate as well as respond to the campus community.

To support this mission CSO:
- Leads planning efforts to ensure continuous improvement in resource conservation at PSU
- Benchmarks PSU’s sustainability performance
- Facilitates collaboration and builds capacity to implement sustainability projects on campus
- Supports students, faculty & staff in becoming conservation leaders

Sustainability means:
- Resource conservation and stewardship
- Living within the limits of our ecosystem
- Understanding the interconnections among economy, society, and environment
- An adaptive, changing process, not a finite destination

Learn about campus sustainability efforts in these categories:
Sustainability Offices on Campus
SUSTAINABLE CAMPUS
FLORIDA STATE UNIVERSITY

Florida State / Sustainable Campus

What is sustainability?

Originally defined in the 1987 Brundtland Commission Report, sustainability is development that meets the needs of today without compromising the ability of future generations to meet their own needs. The three pillars of sustainability include environmental, economic, and social issues.

What is a sustainable campus?

A sustainable campus is one that develops process or management systems that help create a vibrant campus economy & high quality of life while respecting the need to sustain natural resources and protect the environment.

Sustainable programs are those that result from an institution’s commitment to environmental, social, & economic health.

Who we are

The Sustainable Campus program seeks to have our campus serve as a living model of sustainability, providing learning experiences that students, faculty and staff may develop, apply and practice at FSU and in their extended communities.

Our program is rooted in the values of sustainability as a process, participation & action by our campus community, education, and collaboration.

How to get involved

We offer a variety of ways to participate in outreach and volunteer opportunities. A complete listing can be found on...
The Campus Sustainability Office works with faculty, students, staff and community members to catalyze Cornell's transformation into a sustainable campus, including its energy infrastructure...

On Campus

- Energy and Sustainability Department
- Sustainability Office

Senior Director of Energy and Sustainability

Sustainability Offices on Campus
GREENING UNIVERSITIES TOOLKIT

TRANSFORMING UNIVERSITIES INTO GREEN AND SUSTAINABLE CAMPUSES

Developed by UNEP
INTEGRATION AND EXPANSION OF THE ONGOING INITIATIVES

• A (compulsory?) (universal?) Course in the Undergraduate Curriculum
• Course Blended with practice projects
• Projects Implemented, monitored, improvised to expand and make the campus greener
• Innovation as the focus
• Extension Centers for interfacing with alumni and investors
• On a networking mode, across universities for knowledge sharing, revolving conferences etc.
PROPOSED STRUCTURE

Sustainability Lectures

The Course

Course Extension

Sustainability Practice

Sustainability Center for Project Implementation (Alumni, internship)

Sustainability Enterprise for Innovation (Innovators & Investors)

MAGEEP
CREDITS, STRUCTURE & DURATION

• 3 credits: 14 weeks of duration
• Divided into 6 + 8 weeks

• First 6 weeks ("Theory")
• 3 hours a week of lectures (1080 minutes)

• Second 8 weeks ("Practice")
• 6 hours a week of practicums/supervised learning (2160 minutes) to conceive, design, implement, monitor projects that make the campus and neighborhood resource efficient & green
TOPICS FOR LECTURES

• L1, L2 & L3: Global, Regional, National and Local Issues on Sustainability

• L4, L5 & L6: Evolution of the Sustainability Concept, Principles of Sustainability

• L7, L8 & L9: Sustainability Case Studies – Government, Business and Communities

• L10, L11 & L12: Barriers and Challenges in Mainstreaming Sustainability, Strategies to Overcome

• L13, L14 & L15: Sustainability & Innovation - Materials, Technologies & Products

• L16, L17 & L18: Sustainable Living/Lifestyles
PEDAGOGY

- Flip model of learning
- E-Learning platform – Video based
- Case study driven, Guest lectures
- Group work
SAMPLE TOPICS FOR PROJECTS

• Solar street lamps
• Solar water heating
• Solar Pumps
• Solar panels
• Solar storage
• Low flow plumbing fixtures
• Grey water recycling
• Rainwater harvesting
• Water treatment
• Wastewater treatment and reuse
• Waste recycling, reuse & recovery
• Waste to energy
• Electric vehicles
• Wind mills
• Biomass to energy
• Management of indoor air quality
• Noise management
• Green furniture
• Landscaping
• Reduction of heat map of the campus
• Elimination/reduction of plastic
• C&D waste recycling
• Green building
• Green meetings/conference
• Green Procurement
• and More …
OPERATIONS AND OUTCOMES

• Collaborative platform for sharing course lectures, resources and outcomes of practice projects (project reports)

• Publications (Project reports, Guidance Manuals, Newsletters, Sustainability Ideas)

• Green Campus Rating – based on projects implemented and their benefits

• Innovations and Partnerships (Students, Professors, Alumni and Investors)

• Revolving Annual Events – bringing in Sustainability Champions on the Campus
NEXT STEPS

• Form a Working Group
• Take on responsibilities
• Mobilize seed funds for sponsoring course development
• Obtain interest and commitment of some of the member universities
• Do test run in Fall, 2014 at two to three locations
PROPOSED COURSE LAUNCH

Summer of 2015