

# **SUNY Orange**



## **Sustainability Master Plan**

revised November 2009

## **A Plan for Sustainability**

SUNY Orange is uniquely situated within the community to serve as a leader in sustainability, thanks to its ability to deliver two-year associate degrees, workforce training and other programming that focuses on environmental issues and prepares community members for “green collar” job opportunities. However, as a community catalyst, SUNY Orange must also demonstrate its own commitment to sound environmental stewardship and implementation of sustainable practices.

In 2007, the College undertook a concerted effort to significantly strengthen its sustainability resume by creating an ad-hoc sustainability committee under the auspices of the College governance system. In the summer of 2008, during its review of the College’s initial Strategic Plan, the SUNY Orange Board of Trustees determined that sustainability would become a highlighted strategic priority in the College’s new Strategic Plan 2009-2014.

With their adoption of the College’s Strategic Plan 2009-2014 in December 2008, the Trustees confirmed that SUNY Orange will strive to accomplish an array of goals over the next three to five years, including: infusing systemic changes campus-wide that will create a more efficient and environmentally friendly Middletown campus; creating a campus “culture” of environmental stewardship via programming that stresses outreach, education and awareness; and raising the “Sustainability IQ” of students, faculty and staff through ongoing programs that promote current trends, the College’s “green” procedures and ways that the College community can become involved.

To assure that the College reaches those goals and remains a responsible caretaker of the environment, the ad-hoc sustainability committee has developed the SUNY Orange **Sustainability Master Plan**. The plan demonstrates the College’s commitment to reducing its impact on the environment in all areas, including developing new academic programs, energy conservation, recycling, use of renewable energy, food services, environmental stewardship and more. This commitment will help SUNY Orange stretch its funding to accommodate other strategic initiatives that target resource allocation and fiscal efficiency. Cost savings from sustainable practices will also generate funds for new and expanded “green” initiatives.

As the College’s initial Sustainability Master Plan was being developed, three key target areas quickly came to the fore. The plan: (1) calls for creation and implementation of overarching policies that govern the College’s future decision-making, (2) targets potential campus operations that can be modified or instituted, and (3) creates methods for promoting awareness of general “green” practices and the College’s progress toward becoming more sustainable.

What follows is a series of sustainable objectives—categorized under the headings of “Planning, Administration and Engagement,” “Operations” and “Education and Research”—accompanied by specific goals, target dates and, in some instances, action items. This plan will remain a work-in-progress but is designed to support the necessary growth and innovation that will guide future College policies, allow SUNY Orange to inject sustainability into its curriculum, facilitate effective College operations, and increase the sustainability awareness of those within the College community and beyond.

## Planning, Administration and Engagement

*Develop policies and procedures to promote sustainability principles in campus-wide decision making.*

- Include sustainability as a priority in College's Strategic Plan 2009-14 and establish benchmarks for reaching certain goals relative to the Strategic Plan
- Conduct an energy audit of the College to identify where changes can be implemented quickly
- Initiate polices, based upon assessment of energy audit results, and target long-range goals and projects that will reduce the College's energy usage
- Utilize Sustainability Master Plan to guide the College's sustainability efforts over the next three to five years
- Utilize external agencies and organizations to assist the College in employing sound sustainability practices
- Continually explore those technologies that will reduce the College's environmental impact (e.g., switching from compact fluorescent to LED lighting)

*Establish administrative contacts for green initiatives in all campus departments.*

- Create a full-time position of sustainability coordinator to oversee the College's efforts
- Until sustainability director is hired, utilize Sustainability Committee and volunteers as clearinghouse for current projects and new initiatives
- Create a campus "culture" of environmental stewardship via programming that stresses outreach, education and awareness
- Raise "Sustainability IQ" of students, faculty and staff through ongoing awareness and promotions programs that stress current trends, the College's "green" procedures and ways that the College community can become involved

*Design all new building projects according to green standards (i.e., LEED certification).*

- Comply with sustainability construction measures and policies adopted by Orange County and State University of New York
- Create footprint for "new and emergent" technologies labs and research space in proposed Science, Engineering and Technology Center to enhance College's sustainability programming, research and compliance
- Develop policies that encourage the College's investigation of available "green" methods when proposing campus renovations
- Research and implement use of photovoltaics, wind turbines, green roof systems, geothermal heating and cooling, daylight harvesting and other emerging technologies to the best extent possible

### **TIMELINE**

Done

Spring 2010

Fall 2010

Ongoing

Ongoing

Ongoing

Fall 2010

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

Ongoing

## Operations

*Create a full-time position of sustainability coordinator.*

- A sustainability coordinator would supervise reductions in energy and water usage, oversee reductions in the amount of solid waste generated by the College, implement green standards in the custodial sector of the College, guide the purchasing of “green” products, direct landscaping practices to minimize runoff and other environmental impacts, and assist in the development and promotion of the College’s sustainability efforts.

### TIMELINE

Fall 2010

*Reduce energy usage.*

- Adopt “green” lighting technologies when possible
- Install occupancy sensors and timers where they are financially viable
- Improve the energy efficiency of operating equipment and facilities
- Incorporate energy-saving measures into the design of new buildings
- Reduce fossil fuel use in transportation by expanding ride sharing and public transit opportunities for commuters, conversion to sustainable biofuels for campus vehicles, etc.
- Complete Greenhouse Gas Report and formulate Climate Action Plan as part of the American College and University Presidents Climate Commitment
- Conduct an energy management audit and implement recommendations where feasible
- Consolidate summer classes into those buildings that are most energy-efficient

Ongoing  
Ongoing  
Ongoing  
Ongoing  
Ongoing

End of 2009

End of 2010  
End of 2010

*Reduce water usage.*

- Explore ways to capture and use rain water (e.g., use of rain barrels at rooftop downspouts, installation of “green” roofing)
- Incorporate water-saving measures into the design of new buildings
- Conduct a water audit and implement recommendations where feasible
- Explore installing low-flow fixtures on bathroom and laboratory sinks

Ongoing

Ongoing  
End of 2011  
End of 2010

*Reduce amount of solid waste generated.*

- Expand the quantity and number of locations, campus-wide, of recycling receptacles
- Expand the types and varieties of items that are recycled by the College
- Examine the benefits and costs of replacing paper towel dispensers in bathrooms and laboratories with electric hand dryers
- Encourage students and employees to use proper recycling receptacles
- Explore the utility of composting appropriate waste materials generated by campus activities
- Reduce paper waste by encouraging students and employees to print/copy fewer sheets
- Conduct a waste audit and implement recommendations where feasible

Ongoing  
Ongoing  
Ongoing

End of 2009  
End of 2009  
End of 2009  
End of 2010

## Operations

*Utilize green standards for all custodial and maintenance projects.*

- Ensure the proper transfer of recyclable waste into proper receptacles
- Transport of recyclables from major campus recycling receptacles to off-campus recycling centers
- Minimize the use of toxic cleaning products indoors
- Use recycled material in all relevant maintenance projects

*Purchase “green” products (those whose production and distribution incur minimal environmental impact) to the greatest extent possible.*

- Purchase items that have a high recycled content or are certified “green,” including materials used at social events and as gifts
- Purchase electricity generated from renewable sources
- Purchase foodstuffs that are produced locally, organically, or via fair trade where feasible

*Use landscaping practices that minimize runoff and other environmental impacts.*

- Restore and maintain a healthy vegetative buffer along the banks of the campus stream
- Use native plant species whenever possible
- Examine alternatives to using toxic chemicals and synthetic fertilizers outdoors
- Explore ways to direct runoff into “rain gardens” to reduce nonpoint source pollution into nearby waterways
- Explore installing “green” roofing that will minimize rainwater runoff

## Education and Research

*Incorporate sustainability topics and issues across the curriculum by:*

- *Assessing current academic activities within the curriculum.*

### ACTION ITEMS

- Conduct survey to assess what sustainability topics are included in the curriculum
- Construct a database of curricular topics relating to sustainability

- *Developing guidelines for incorporating and increasing sustainability literacy in all levels of the curriculum.*

### ACTION ITEM

- Develop guidelines for faculty on how to include sustainability in the curriculum

## TIMELINE

Ongoing  
Ongoing

Ongoing  
Spring 2010

End of 2009

End of 2009  
End of 2010

Ongoing  
Ongoing  
Ongoing  
End of 2010

End of 2011

Fall 2009  
Fall 2009

Fall 2009

## Education and Research

*Incorporate sustainability topics and issues across the curriculum by:*

- *Developing sustainability programs.*

### ACTION ITEMS

- Add courses on sustainability topics to non-credit programs
- Provide information about careers in sustainability
- Hire new faculty and staff who care about sustainability
- Offer a sustainability component in one section of each course, identified with a sustainability symbol in the course catalog.
- Develop an interdisciplinary sustainability survey course to explore the problems and solutions for long-term sustainability in such areas as energy, species survival, technology, lifestyle choices, transportation and careers (to include a choice of a non-lab lecture course or lecture with lab, as well as choice of science or social science credit for course)
- Award a sustainability certificate to students who complete their degree program with a certain number of such sustainability-infused courses

## TIMELINE

Done  
Ongoing  
Ongoing  
Spring 2010

Fall 2010

May 2011

*Promote sustainability principles in campus activities by:*

- *Creating an informational, interactive web site with a prominent link from the SUNY Orange home page.*

### ACTION ITEM

- Assign a webmaster, locate suitable location within College web site, and develop site

Fall 2009

- *Creating College-wide policies and procedures to promote green principles.*

### ACTION ITEMS

- Include a "green" strategy in each departmental master plan and each student activity event
- Create a document with specific guidelines for the organization of sustainable campus activities (e.g.: which brand of cups are made of corn, rather than petroleum products, whom to contact for recycling bins, and where to buy local food products)

Ongoing

Fall 2009

- *Participating in reputable environmental rankings.*

### ACTION ITEMS

- Participate in the American College and University Presidents Climate Commitment
- Join National Wildlife Federation Campus Ecology Project
- Get rated by the College Sustainability Report Card at greenreportcard.org
- Create a star-system in which campus activities can be rated based upon their level of sustainability (the stars can then be added to any promotional materials)

Ongoing

Fall 2009

Fall 2009

Spring 2010

## Education and Research

Coordinate sustainable resources for use by faculty, staff and administration by:

- *Highlighting and featuring sustainability projects.*

### ACTION ITEMS

- Document campus-wide activities on video and in other media
- Enrich "green" events with speakers and artists
- Create a resource pool with cross-disciplinary lesson models and project templates
- Compile a resource list of works of classic and contemporary "green" thinkers and philosophers to infuse into courses

- *Collaborating with College Library and Center for Teaching and Learning to store and index all sustainability projects.*

### ACTION ITEM

- Promote sustainability awareness through the Library by realigning/upgrading staffing descriptions; sponsoring more programs on sustainability topics; displaying icon/video message activated by print button on library and lab computers as a prompt to use less paper; creating a database of faculty research projects relating to sustainability in their academic field, and for student projects which focus on sustainability

- *Utilizing technology resources to promote sustainability.*

### ACTION ITEMS

- Monitor technological changes in information delivery methods (support e-books and implement College-wide standards for electronic materials and delivery systems compatibility)
- Offer more distance learning and hybrid courses to reduce commuter traffic
- Reduce paper usage by providing technical training for students and faculty in electronic "cut and paste" skills
- Implement a charge for paper use in labs and Library that connects to student account

## TIMELINE

Ongoing  
Ongoing  
Fall 2009  
Fall 2009

Ongoing

Ongoing

Ongoing  
Ongoing

Fall 2009

## Education and Research

Create a campus-wide awareness of “green” issues by:

- Identifying and implementing sustainable practices across campus

### ACTION ITEMS

- Conduct workshops with speakers
- Explore possibility of cafeteria composting
- Create a logo that would express the need to recycle
- Explore possibility of creating a student club for sustainability that would span all programs and ensure the continuation of sustainability activities into the future
- Create a “green” scholarship
- Set up an electronic bulletin board or database in which all sectors of the college community could post information about providers of “green” services and goods
- Create a demonstration for a defined time frame (semester, academic year) that would collect and display one particular type of recycled material, to demonstrate to the college community the actual amount of recycling that is taking place

### TIMELINE

Ongoing  
Ongoing  
Fall 2009  
Fall 2009  
  
Fall 2009  
Fall 2009  
  
Fall 2009

- Encouraging individual responsibility for sustainability.

### ACTION ITEMS

- Encourage administration to e-mail all flyers, memos and other forms of information as electronic attachments rather than paper versions
- Require that sustainability be part of the year-end report from the departments (to encourage departments to think about sustainability on a regular basis)
- Involve KinderCollege in recycling awareness
- Engage individuals by creating contests for logos and catchwords for activity names
- Have faculty make greater use of Angel for submission of projects and homework
- Convey sustainability principles and practices to students at orientation events

Ongoing  
  
Ongoing  
  
Ongoing  
Fall 2009  
Fall 2009  
August 2010

- Publicizing the College’s “green” practices, new LEED construction in Newburgh and Middletown, and sustainable upgrades.

### ACTION ITEMS

- Place signage in new buildings and at sustainably retrofitted sites on campus to describe sustainable features
- Offer tours to the public

Ongoing  
  
Ongoing



## Education and Research

*Coordinate with other community groups by:*

- *Collaborating with local and regional businesses, organizations and municipalities on sustainability issues*

### **ACTION ITEMS**

- Partner with the cities of Middletown and Newburgh to create a framework for student internships
- Conduct a comparative analysis of waste products and recycling of the College versus the cities of Middletown and Newburgh
- Establish a year-round farmers market, possibly located at the College, to provide fresh produce for the College and local community
- Coordinate with appropriate municipal and county bodies the strengthening of public transit systems

- *Sharing sustainability resources among community groups.*

### **ACTION ITEMS**

- Create community awareness of SUNY Orange events relating to sustainability such as Global Initiative activities, films and lectures
- Create web site links to resources, such as Orange County farms, markets, green products businesses and LEED information

## **TIMEline**

Ongoing  
 Fall 2009  
 Fall 2010  
 Spring 2010  
  
 Ongoing  
 Fall 2009