

## SPRING 2015

### Composting and Organics Recovery

Course: CPSP389 Faculty: Drs. Mira Azarm & Nicole Mogul

Frederick wants to encourage its residents and businesses to embrace composting as part of their daily waste stream practices. This project investigates the long-term impacts of municipal composting programs and helps create a comprehensive and effective plan that includes marketing, implementation & end product usage.

### Enhancing Environmental Resilience

Course: PUA798F Faculty: Dr. Anand Patwardhan

Adaptation to climate change is vital to the long-term sustainability of communities. This project identifies and evaluates specific climate-related risks and proposes adaptation interventions in the City with regard to water needs (supply constraints) and summer "heat islands."

### Reimagining the North East Street Corridor

Course: LARC648 Faculty: Jack Sullivan

After in-depth analysis, student designs address landscape infrastructure, urban character, adaptive reuse, market forces and long term socio-cultural influences. Proposals will include site specific and area wide urban design concepts.

### Recreation Plan for Stewardship of the Watershed

Course: LARC341 Faculty: Dr. Chris Ellis

Frederick is enhancing its Watershed Stewardship Plan to carefully accommodate some recreational activities. After reviewing existing plans, regulations and environmental constraints, investigating environmental and cultural contexts, students are developing a recreational master plan that responds to very diverse stakeholders.

### East Frederick Rising Industrial Redevelopment

Course: URSP688V Faculty: Dr. Scott Dempwolf

The East Frederick Rising Vision Plan (EFR) looks to major mixed use growth and land use succession. This will impact current industrial land users and new manufacturing startups. This is an industrial land use study for East Frederick to assess current conditions, likely impacts and planning options for the City under the EFR Plan.

### Traffic and Greenhouse Gases

Course: URSP 788 Faculty: Dr. Fred Ducca

This project assesses the GHG impacts of specific traffic improvements along major highways in the City and the tradeoffs between reducing congestion and air quality.

### Developing a Sustainability Plan

Course: URSP 705 Faculty: Dr. Jim Cohen

This course assesses precedents for such Plans nationally and then synthesizes all the relevant work done by PALS courses and applies it to enhancing and updating the City's adopted Sustainability Plan.

### Promoting Local Businesses

Course: BUSI758R Coordinator: Pammi Bhuller

Building on the Fall's Selected Industry project, this involves further analysis of the business conference and corporate airport sector studies and develops strategic plans for them. Students are also investigating the status and potential of the B & B industry and how to bolster the local job market by increasing material sourcing from within the City.

### East Frederick & Monocacy Boulevard Development

Course: ARCH407 Faculty: Jana Vandergoot

This course revisits Frederick's current model for greenfield development near Liberty Road and Catoclin Mountain Highway. Students are creating a development plan in East Frederick and site plans for City owned properties near the airport and Monocacy Boulevard. These stress urban design that balances ecological, social, and economic factors.

### Re-Use of the Renn Farm\*

Graduate Thesis Landscape Architecture Student: Seth Fleming

The Renn Farm floodplain currently functions as the release grounds for the Carroll Creek Flood Control Project. This design project, focused on vegetation master planning and biodiversity design and management, will transform the floodplain into a city park and a key link in the path system.

PALS is housed within the National Center for Smart Growth and is funded by a modest charge per course from the participating jurisdiction and a grant from the UMD's Office of the Provost. PALS covers all course-related travel expenses and provides additional incentives for participating faculty. In addition to Frederick, PALS is concurrently partnering with the City of College Park. PALS will be soliciting proposals for the 2015/2016 jurisdiction in October, 2014. Visit the PALS website @ [www.smartgrowth.umd.edu/pals](http://www.smartgrowth.umd.edu/pals)

# PARTNERSHIP for ACTION LEARNING in SUSTAINABILITY



*PALS is harnessing the knowledge and experience of University of Maryland faculty along with the energy and ingenuity of the University's students to advance environmental, economic and social sustainability in Maryland's communities. For the 2014-2015 academic year, UMD has joined forces with Frederick, MD to build on the City's sustainability efforts. Thirty courses will involve 350 students drawn from 10 schools across the College Park Campus to focus over 50,000 student hours on helping build a more sustainable City.*



**For more information please contact**  
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## FALL 2014

### Minority-owned Businesses: Outreach in Golden Mile\*

Course: URSP673/688z Faculty: Dr. Willow Lung-Amam

In 2010, Frederick launched the Golden Mile Small Area Plan to revitalize the largely minority- and immigrant-owned business area in the western part of the City. To engage these businesses, UMD is partnering with Centro Hispano and the Asian American Center to prepare the community for the City's future redevelopment plans and help them become active players in the implementation process.

### Downtown Architectural Tour Guide

Course: HISP655 Faculty: Dr. Don Linebaugh

Frederick, has an award-winning historic district. This tourist destination and the City's preservation efforts play a key role in its economic growth. A missing ingredient is an architectural walking tour guide to promote tourism and highlight the area's architectural and social significance. Both brochure and electronic versions are being created.

### Climate Change and the Frederick Watershed

Course: CONS670 Faculty: Dr. Keryn Gedan

Using the City's reservoir watershed as a living laboratory, biology students are mapping biodiversity and invasive plant species throughout the trail network and examining how climate change impacts the watershed. They are also developing approaches to avoid or mitigate environmental harm and recommending forest management actions.

### Selected Industry Analysis

Course: BUMO758K Faculty: Dr. Protiti Dastidar

To enhance its business environment, the City is enlisting this graduate business course to analyze Frederick's business conference potential and corporate airport potential and competition. Students' recommendations are helping position and market Frederick's new conference center and its Municipal Airport.

### Designing the Shared Use Path

Course: LARC642 Faculty: Dr. Chris Ellis

More walkable and bikeable cities are the cornerstone of modern urban design. Frederick wants new, effective design concepts for currently undeveloped portions of its Shared Use Paths. This project aims to improve connectivity between neighborhoods and community amenities through bicycle and pedestrian transportation within an ecological greenways framework.

### Economics of Historic Preservation

Course: HISP680 Faculty: Dr. Constance Ramirez

Frederick wants to understand exactly how rehabilitation projects support the local economy and how property owners benefit from historic preservation. This project establishes a data collection program to help the City quantify the economic benefit of each dollar spent on restoring and protecting Frederick's historic buildings.

### Development Plans for Surplus City Property\*

Course: RDEV688I Faculty: Margaret McFarland, J.D.

As part of a capstone real estate development course, students are targeting a key City property. They are conducting a market analysis, proposing a design-based development program, calculating construction and soft costs and identifying potential financing. The several alternatives developed provide feasible site development options for the City.



### Feature Writing

Course: JOUR371 Faculty: Marlene Cimons

Feature writing gives journalists the opportunity to be creative, convey a compelling narrative, or chronicle an unfolding story. This project enlists the creativity of UMD's journalism students to report on some of the PALS projects and tell the story of the University/City partnership.

### Jefferson Street Corridor Revitalization

Course: ARCH700 Faculty: Matt Bell

The revitalization of a historic city is no easy feat. In this project students, working with local stakeholders, are documenting and analyzing site-specific and corridor-wide opportunities and constraints for redevelopment. Their design proposals range from building to neighborhood scales, incorporating public spaces, building fabric/type.

### Complete Streets: East Street Corridor\*

Graduate Thesis Landscape Architecture Student: Jun Jiang

The focus of the East Street Corridor project is the conversion of an auto-dominant street to a multi-modal facility which incorporates landscaped sidewalks and connects to the City's parallel rails-to-trails project.

### Greenhouse Gas Inventory

Course: URSP688 Faculty: Sean Williamson

In order to better assess and manage carbon emissions, a key metric of sustainability, Frederick is working with students to learn about their energy consumption patterns and costs via a carbon inventory for municipal buildings and identify ways for reducing greenhouse gas emissions and advancing related sustainability goals.

### Mapping Neighborhood Identities

Course: URSP688L Faculty: Dr. Chao Liu

Frederick, increasingly culturally diverse, has proposed an ambitious project to map the cultural resources and identities of the City's neighborhoods. The class is mapping neighborhood cultural resources and exploring alternative configurations of neighborhoods using social media, survey, and video/photo-sharing technologies.

### Video Storytelling\*

Course: JOUR368v/688v Faculty: Bethany Swain

Journalism students are creating in-depth video stories around Frederick which will highlight the sustainability effort through character-driven pieces, representing a variety of voices and perspectives on their chosen topic.

### Algae in Carroll Creek

Course: LARC452 Faculty: Dr. David Myers

This landscape architecture course focuses on how green infrastructure in an urban area contributes to the ecosystem by investigating the ecology of Carroll Creek Park. The class is exploring and proposing green infrastructure solutions to mitigate challenges like excessive algae growth.

### The Latin Connection

Course: Latin 472/672 Faculty: Dr. Judith Hallett

Frederick will host this high school competition (Certamen) in Latin to celebrate Earth Day. Students will develop questions about ancient Roman writings and efforts to cherish the earth and natural environment which much influenced our classically-trained, agrarian Founding Fathers.

\* Project occurs in the fall and spring semesters