MEMORANDUM OF UNDERSTANDING
Between
University of Maryland College Park
and
The City of Frederick, Maryland
for the
Partnership for Action Learning in Sustainability Program

This Memorandum of Understanding (“MOU”), effective on the last date of signature below (“Effective Date”), is hereby entered into by and between the University of Maryland College Park (“UMD”), a public agency and instrumentality of the State of Maryland, located in College Park, Maryland, on behalf of the University of Maryland National Center for Smart Growth Research and Education (“Center”) and the City of Frederick (“City”), a municipal corporation in the State of Maryland collectively the “Parties.”

Purpose. The Parties share interests in meeting the needs of Maryland residents, businesses, and visitors by studying and addressing known redevelopment, economic development, transportation and parks planning, and general municipal strategies to promote sustainable development. Based on these premises and for good and valuable consideration, the Parties hereby agree as follows:

1. Scope of Project. The Partnership for Action Learning in Sustainability (PALS) program (“Program”) is a Center initiative to address the needs of local jurisdictions. The City has presented real-life needs and problems to the Center, which will incorporate a study of these needs into existing UMD course curricula (“Projects” or “Courses”). UMD students and the Center will propose solutions that may allow the City to resolve existing problems and meet future municipal needs. For the purposes of this MOU, Projects or Courses are defined as either: a) ones that the City will support financially (“Supported Courses”), or b) those which it approves and will collaborate with but will be financed by others (“Approved Courses”).

2. Responsibilities of Parties.
   a. For all projects, the City shall be responsible for:
      i. Discussing and confirming with City officials, departments, agencies and affiliated agencies candidate projects for the PALS programs and collaborating with the Center during this process.
      ii. Developing a list of Candidate Projects and collaborating with the Center to develop a Final Scope of Work for each Project.
      iii. Identifying which Courses or Projects on the list will be Supported or Approved.
      iv. Identifying a PALS liaison who will serve as the central point of contact, or assign other points of contact, for every Project or Course.
      v. Providing technical assistance and relevant information in support of the Projects, including but not limited to existing data and previously prepared reports, findings, architectural plans and maps, stakeholder or public engagement activity summaries, and other information necessary to establish context for each Project.
      vi. Participating in a kick-off event, mid-course reviews of student progress, and year-end activities.
vii. Collaborate in Center efforts to develop and distribute material that describes the Program to broader audiences.

viii. Participate in a Program evaluation effort led by the Center upon Program completion.

b. For all projects, UMD shall be responsible for:
   i. Reviewing the City’s proposed Projects and collaborating with the City to develop a Final Scope of Work for each Project.
   ii. Identifying a PALS Liaison who will serve as the central point of contact, or will assign other points of contact, for every Project or Course.
   iii. Collaborating with the City in identifying which Courses or Projects on the list will be Supported or Approved.
   iv. Incorporating each mutually agreed-upon Project into an existing or new course and assigning a faculty member to oversee the Project or Course.
   v. Providing and supervising students to work on the Projects using City-provided and student-generated information and to prepare analyses, recommendations or reports that respond to the Scopes of Work.
   vi. Preparing and providing the City with final reports and relevant student-generated materials in electronic format (or one copy in paper format, at the City’s request). The final reports will present a summary of coursework, key findings, examples of student work, and recommendations for each Project.
   vii. Collaborate with the City in Center efforts to develop and distribute material that describes the Program to broader audiences.
   viii. Coordinating a kick-off event, mid-course reviews, and year-end presentations and activities.

3. Scope of Work. The Scope of Work for each Project will be mutually agreed-upon and managed by the Center and the City and shall:
   a. Reference this MOU specifically as the “City MOU” and include the program’s course number that will reference the project;
   b. Be described in a consolidated SOW which assembles all Supported Course Descriptions and deliverables. Approved Courses are also assembled for informational purposes only, and not part of the MOU. Both of these are in Exhibit 1 to this MOU.
   c. Be signed by an authorized official of each Party. The authorized official for UMD is Ms. Evan Crierie, Assistant Director, UMD Office of Research Administration ("ORA"), or any other Director, Assistant Director, or Contract Manager in ORA. The authorized official for the City is the Mayor.

4. Compensation. For each Supported Project or Course, the City will pay a fixed-price of $5,000 to UMD. This MOU assumes a total of 18 Supported Courses amounting to a cost of $90,000. Any costs above $5,000 (e.g. for design and printing of multiple copies) will be negotiated between the City and UMD on a case-by-case basis. All payments will refer to the PALS MOU and UMD invoice number, be made payable to the University of Maryland, and sent to the following address:

   University of Maryland
   Office of Contract & Grant Accounting
   4101 Chesapeake Building
The schedule for payments shall be as defined below:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>$30,000</td>
<td>Signing of the MOU</td>
<td>September 26, 2014</td>
</tr>
<tr>
<td>$30,000</td>
<td>Completion of Fall Courses and Deliverables</td>
<td>December 19, 2014</td>
</tr>
<tr>
<td>$30,000</td>
<td>Completion of Spring Courses and Deliverables</td>
<td>May 19, 2015</td>
</tr>
</tbody>
</table>

It is understood that the number of Supported Courses may change over the 2014-2015 timeframe and that the MOU may be amended accordingly.

5. Term and Termination.
   a. This MOU shall remain in force for a period of fifteen (15) months after the Effective Date and may be renewed or extended by mutual written consent of the Parties.
   b. Either Party may terminate this MOU at any time provided that the terminating Party provides thirty (30) days written notice prior to termination.
   c. Within sixty (60) days following the expiration or earlier termination of this MOU, each Party shall return to the other Party any information or materials it received from the other Party and is not entitled to retain under this MOU. UMD will submit a final report to the City of all funds received and expended for the Projects and will refund any unused and uncommitted funding it received from the City, but will be entitled to retain funds to cover previously-made financial commitments that cannot be canceled without liability to UMD.
   d. The termination or expiration of this MOU shall not affect either Party’s rights or obligations that accrued prior to the effective date of termination.

6. Contacts and Notices. Any notice required to be given under this MOU shall be given in writing and delivered (1) in person with documentation of receipt; (2) by facsimile or via email of scanned document (a PDF is sufficient) with documentation of delivery; or (3) by first class mail, postage prepaid and addressed to each party’s designated contact, identified below, or such other person a party may subsequently designate in writing. A notice shall be deemed effective when received. Notices shall be delivered to:

   For UMD: Ms. Evan Crierie  
   Assistant Director  
   Office of Research Administration  
   3112 Lee Building  
   College Park, MD 20742  
   oraa@umd.edu  
   Phone: 301-405-6269

   Copy to Center: Dr. Gerrit Knaap  
   Director, NCSG  
   1112 Preinkert Field House  
   College park, MD 20742  
   gknaap@umd.edu  
   Phone: 301-405-6083
7. General Terms and Conditions.
   a. **Modifications.** Any modification of this MOU shall be effective only upon the mutual written agreement of authorized representatives of both Parties.

   b. **Ownership of Work Product.** For Supported Projects, each Party shall retain ownership of its own work product. Each Party hereby grants to the other Party a non-exclusive, royalty-free, worldwide, perpetual license to use, copy, and distribute any work product and other information provided under this MOU for non-commercial, internal educational and research purposes only. For Approved Projects, (not financially supported by the City) UMD shall retain ownership of its own work product which it may share with the City at the discretion of PALS in consultation with course faculty. Use of this work product by the City shall only be as agreed to by PALS and course faculty and students, as appropriate, in writing.

   c. **No Third Party Beneficiaries.** This MOU is for the benefit of the Parties; there are no third party beneficiaries.

   d. **Relationship.** Nothing is this MOU shall be construed to create a partnership, agency, or joint venture between or among the Parties. Neither Party has authority to make any statements, representations or commitments of any kind on behalf of the other Party except as the Parties may agree in writing.

   e. **Assignment.** This MOU and any rights and obligations hereunder shall not be assigned without the prior written consent of the non-assigning Party.

   f. **Liability.** Each Party assumes full responsibility for the acts or omissions of its respective employees, agents, and representatives. IN NO EVENT WILL EITHER PARTY OR THEIR OFFICERS, AGENTS OR EMPLOYEES BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUSINESS EXPENSE, LOSS OF PROFITS, DAMAGE OR INJURY TO PROPERTY FOR ANY CLAIMS, DEMANDS OR DAMAGES ARISING OUT OF THE EXISTENCE AND/OR USE OF THIS MOU EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

   g. **Governing Law.** This MOU shall be governed by the laws of the State of Maryland without references to its conflicts of laws principles.

   h. **Entire Agreement.** This MOU constitutes the entire agreement and understanding by and among the Parties on the subject matter presented herein and supersedes any and all prior agreements, understandings, or commitments, written or oral, between the Parties. There are no representations, warranties, agreements or understandings, express or implied, written or oral between the Parties relating to this subject matter that are not fully expressed herein. This MOU may be
executed in duplicate and each original shall be equally effective. The Parties accept electronic delivery of the executed MOU.

AGREED TO:

CITY OF FREDERICK, MARYLAND  UNIVERSITY OF MARYLAND COLLEGE PARK

Authorized Signature  Authorized Signature

Randy McClement  Evan Crierie

Frederick, Mayor  Assistant Director, ORA

Date  Date

UNDERSTOOD AND AGREED TO BY UMD NATIONAL CENTER FOR SMART GROWTH

Signature

Printed Name

Date
**Exhibit 1 – Table of Contents**

**Supported Courses (Funded by the City)**

<table>
<thead>
<tr>
<th>Planning, design and preservation</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. City Architectural Tour</td>
<td>7</td>
</tr>
<tr>
<td>2. Jefferson Street Corridor Redesign</td>
<td>9</td>
</tr>
<tr>
<td>3. Shared Use Path Design</td>
<td>11</td>
</tr>
<tr>
<td>4. C-2 Property (2 semesters)</td>
<td>13</td>
</tr>
<tr>
<td>5. East Street Corridor</td>
<td>15</td>
</tr>
<tr>
<td>6. Dev. Plan for the Airport vicinity</td>
<td>18</td>
</tr>
</tbody>
</table>

**Community development and social history**

| 7. Golden Mile (2 semesters)               | 20          |
| 8. Mapping Neighborhood Identities         | 23          |
| 9. East Frederick Rising Revitalization    | 25          |

**Environment**

| 10. GHG Emissions Inventory               | 27          |
| 11. Climate Change and the Frederick Watershed | 29        |
| 12. Carroll Creek Ecology                 | 31          |
| 13. Watershed Plan revision               | 33          |
| 14. Climate Change Resilience and Adaptation | 36        |

**Economy**

| 15. Industry Analysis (2 semesters)       | 38          |

**Approved Courses (Funded by PALS)**

**Planning, design and preservation**

| 1. Renn Farm (thesis project - 2 semesters) | 40          |
| 2. East Street Corridor ROW improvements   | 41          |

**Community development and social history**

| 3. Frederick Oral Histories                | 42          |
| 4. Feature Writing                         | 44          |
| 5. Video Storytelling (2 semesters)        | 46          |
| 6. Latin Certamen                          | 48          |

**Environment**

| 7. Compost/Organics Recovery               | 49          |

**Economy**

| 8. Economics of Historic Preservation      | 51          |
City Project: Architectural Tour Guide for Downtown Frederick
Course Title (Number): American Vernacular Architecture (HISP 655)

Faculty: Donald W. Linebaugh
Semester: Fall, 2014
Class size: 1
Grad/Undergrad: Graduate

Primary City Contact: Lisa Mroszczyk Murphy
Other city contact: Matt Davis
Internal Constituencies: N/A
External Constituencies: N/A

Course overview: A student in this course, Abby Tsefaye, will make this her project. She will develop a basic understanding of the City of Frederick, its historic resources, and its social history. She will compile, review and synthesize the downtown’s architectural history and will explore other comparable cities that have implemented their own architectural tour guides. She will research the effectiveness of different tour guides and consider the tools that best represent the city’s architectural resources with the goal of providing the city with an effective promotional tool.

PALS component: In the first half of the class, student will consider the city’s historic resources. This portion of the course will focus on assessing historical significance and social history. Initially student will assess the city’s existing resources and guided tours before production phase. In the second half of the class, student will work with the City of Frederick to develop a user friendly architectural walking tour guide that promotes the city’s historic resources, significant sites, and preservation goals.

Course deliverables: Student will be tasked with determining the city’s significant and popular sites. Student will work with the city to select these sites and research the social histories associated with each site. Student will use this information to produce for the City of Frederick:
(1) List of cities of comparable size with corresponding walking tour guides to establish a point of reference.
(2) Recommend sites of architectural and social significance for the city’s own walking tour guide.
(3) Create a walking tour guide that capitalizes on the city’s historic downtown to engage the community in its local history and promote its preservation goals.
The guide will be accompanied by a detailed document and a presentation of findings and recommendations to City officials at the end of the semester. In the spirit of capturing the lessons learned and knowledge developed for the long-term benefit of the City, the report will include a description of process, site visits, community engagement, and recommendations for future projects.

Student Learning Objectives:
- Firm understanding of preservation efforts in a historic district as well as a basic understanding of how to promote preservation goals for economic development.
- An understanding of policies and actions local governments can take to promote preservation goals and economic development.
- Ability to establish and promote a city’s key sites to attract tourism.

City Responsibilities:
- Collect existing resources necessary to create a comprehensive, architectural walking tour guide.
- Remain available for questions/discussions related to historic sites and resources, providing insight and recommendations. This will include several phone calls between instructors and City during preliminary research, and 1-2 meetings between student and the City, including final presentation of findings.
- Cover expenses related to cost of production related to architectural walking tour guide and final product (to be designed by student in this course or by a graduate assistant within the department after course is completed).

**PALS Responsibilities:**

- Cover expenses related to student travel to Frederick (twice).
- Coordinate with the City of Frederick for preliminary data collection.

**Tentative Timeline:**

- **July-August** – Collection of existing resources from the City of Frederick, selection of sites for architectural walking tour, finalize structure of semester and course deliverables;
  - **Checkpoint:** Call with City of Frederick in late August to make sure resources are collected, and sites for walking tour have been established.
- **September** – Start off course with initial classes focused on sites, the student is introduced to the City of Frederick (including site visits), and begin to compile other examples of historical walking tours, comparable in scale.
- **October** – The student will investigate social histories of each site and compile primary sources by engaging with local community members; mid-term will review content collected for tour guide.
  - **Checkpoint:** Call/web conference with City of Frederick in late October to show some preliminary results and discuss structuring results/analysis to maximize effectiveness.
- **November** – Preliminary research is complete; student will transition to developing the tour guide as a product.
- **Early December** – Presentation of results to the City of Frederick by student including research of each site and recommendations for the City to promote preservation through architectural walking tour. The student will submit walking tour in product form for final grade.
- **Mid-January** – Report will be finalized and delivered to the City of Frederick after review by instructors, and additional writing as necessary (executive summary and methods).
Course Title (Number): Urban Design in the American City (ARCH700)

Faculty: Matt Bell
Semester: Fall 2014
Class size: 17
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis
Other city contact: Brandon Mark
Internal Constituencies: Engineering, Economic Development
External Constituencies: NAC 9 & 10

Course overview: This course will investigate current design issues and the phenomenon of the American city and its urban design characteristics in form and program. Students will examine formal, morphological issues in building fabric, landscape order and development programming and will work in groups in selected sites. The studio will engage precedents in urban design from the American context as well as other settings, and will propose a variety of solutions ranging from building-scale studies to larger questions of neighborhoods, corridors, public spaces and building fabric and type.

PALS component: The principle vehicle for these investigations will be sites in the City of Frederick. Students will work initially in teams to develop analytical approaches, site histories, and appropriate precedents as well as in conjunction with stakeholders from Frederick to identify sites for study and overall issues for development in general.

Once sites and problem area focuses are developed, students will work in teams to develop design proposals for each study area. Design proposals will be developed at a variety of scales, from the regional to the building, and will be explained and documented in plan, section and perspective views as well as three-dimensional models. The studio will engage the Frederick community in a variety of formats, from small group meetings to larger workshops.

Course deliverables: In the end, a studio report documenting the sites, analysis and design proposals will be developed to guide further speculation for each of the sites undertaken.

Student Learning Objectives:

Students will focus upon studio problems and theories concentrating on urbanism and urban design techniques. Issues and sites range from high density urban in-fill to suburban and greenfield development in American and other contexts. Studio theories explore such topics as Contextualism, Neo-Traditional design, Transit-Oriented Development, density, sustainable development, building typology, and street design.
City Responsibilities:

- Be available for questions/discussions (by phone) during the due diligence phase particularly and throughout the semester
- Grant access to the property and contact information for any abutting property owners if relevant
- Attend and provide feedback to each student at a preliminary and final meeting/presentation of their reports at which key City officials, including at least one elected official would attend. It is assumed this would be in the City of Frederick
- Additional financial support to produce studio report during January 2015

PALS Responsibilities:

- Cover expenses related to student and instructor’s travel to Frederick (three times)
- Public relations on press release for the reports produced by the students

Tentative Timeline:

- **August** – Studio kick-off
- **September** – Project kick-off (end of month)
- **October** – On site Charrette in Frederick
- **November** – Project Development
- **December** – Final project presentation
City Project: Shared Use Path Design
Course Title (Number): Graduate Studio III (LARC 642)

Faculty: Christopher D. Ellis
Semester: Fall 2014
Class size: 8 - 12
Grad/Undergrad: Graduate

Primary City Contact: Tim Davis
Other city contact: Matt Davis
Internal Constituencies: Parks & Recreation
External Constituencies: Bike / Ped Committee

Course overview: This course focuses on the interaction of landscape science (hydrology, ecology, etc.) with the necessities and mechanisms of human settlements (transportation, recreation, etc.) emphasizing innovative and forward thinking solutions to urbanization and ecological problems. It may apply this knowledge to landscape analysis, recreational planning and design, and community development, emphasizing resource management, spatial organization, landscape character, and the physical and social structure of community services.

The course uses the studio method of instruction which is a traditional learning-by-doing approach to design learning. Students are assigned projects to be explored under the observation and supervision of a studio instructor who assists in defining critical issues and formulating approaches to discover design problems and develop possible solutions. The studio is an important learning environment in design education and student progress is assessed on the basis of their commitment and discipline in using it effectively.

PALS component: LARC 642 will assist the City of Frederick by producing design concepts for currently undeveloped portions of the Shared Use Path Master Plan. The designs will focus on bicycle/pedestrian transportation connecting neighborhoods with community amenities within an ecological greenways framework. Designs will engage the most recent national design standards and will address all previous plans and documents provided by the City of Frederick.

Course deliverables: A written and illustrated report that includes an executive summary, introduction, review of existing plans/regulations and other constraints, site analyses, diagrams, plans, sections and illustrations, summary/conclusion, appendices for important resources, and a list of cited references.

Student Learning Objectives:

- Investigate and record the cultural and environmental context along a shared use path and greenway corridor
- Apply the current principles of bicycle transportation planning and design
- Identify, analyze and design for protection of sensitive natural resources
- Organize and present environmental themes and parameters that guide site planning and design decision-making
- Demonstrate proficiency in using GIS and CAD software to support site design processes
City Responsibilities:

- Provide GIS data for the share use path sites including (but not limited to) parcels/ROW, utilities, contours, hydrology, wetlands, floodplains, vegetation, soils, land use, zoning, historic sites, roads, building footprints, pavement edges, sidewalks, bicycle infrastructure, aerial photos (leaf on and off if possible)
- Provide reports and studies related to the existing problem
- Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This may include conference calls between instructors and City throughout the project, and 2-3 meetings between students and the City, including a kick-off meeting, mid-project review, and final presentation of designs

PALS Responsibilities:

- Cover expenses related to student/faculty travel to Frederick as needed. The students will travel by van to the site and Ad Hoc Committee meetings
- Contribute to expenses related to printing and presentation materials
- Coordinate with University public relations on any press release or information

Tentative Timeline:

- **Summer** – Collection of GIS Data, reports and related studies; ongoing communication between faculty member and City
- **Monday, September 8** – Studio class tours the shared use path design sites as well as existing paths followed by meeting with the City. The City will provide guidance to the studio class for needs in preparing the shared use path designs
- **Monday, October 6** – City personnel will visit the University of Maryland to review initial design ideas. Draft plans will subsequently be revised based on feedback by the Ad Hoc Committee
- **Monday, October 20** – Final presentations of master plans and distribution of final report
City Project: C-2 Property
Course Title (Number): Capstone Course for Master's of Real Estate Development Site (RDEV688I-0105)

Faculty Advisor: Margaret McFarland
Semester: Fall 2014
Class size: 3 - 6
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis
Other city contact: Richard Griffin
Internal Constituencies: M&B
External Constituencies: Downtown Frederick Partnership

Course Overview: The goal of the capstone course is to provide real estate development graduate students with an opportunity to apply acquired classroom knowledge to real world conditions. This semester, each student in the class will work separately to create their own unique development proposal addressing the market analysis, entitlement process, design, construction and financing for the project.

PALS Component: The City of Frederick has issued an RFP for Site C-2 Property, a critical in fill property along Carroll Creek. The entire course will be devoted to each student doing a market analysis, proposing a development, obtaining a design for the program they propose, figuring out construction and soft costs for the development, and identifying potential financing for a feasible real estate development project. Students will engage with City officials relative to any municipal restrictions and/or plans for the property; and, if desired, will work with any citizen groups identified by the City in determining what entitlements process would be necessary or expedient for this property.

Course deliverables: Each student will produce a 30 – 50 page feasibility study, as well as a 10 minute power point presentation about their proposal for the site. In effect, the City of Frederick will have four responses to its 2009 RFP or any revisions that they wish to indicate after discussions with the faculty and students to enhance or otherwise modify the RFP provisions.

Student Learning Objectives:

- Develop an understanding of the zoning, other regulatory processes, and requirements applicable to the site – the entitlements process.
- Develop an understanding of the interplay of the financial constraints, and financing mechanisms that would be applicable to any redevelopment proposal and opportunities/constraints arising from those processes.
- Develop an understanding of the design and construction processes and their impact on development and finance decisions.
- Demonstrate that they have mastered the basics required of all developers in projecting what it would take to move a project from site identification to completion and operation, with a particular emphasis on the QUADRUPLE Bottom Line of Environmental Sensitivity, Social Responsibility, Financial Viability and Sustainable Design
City Responsibilities:

- City Liaison must meet with the instructors once before the semester begins to assure that the course will proceed as planned.
- Meet with students, direct them and make available various city officials, including elected officials, as part of the due diligence during the entitlements process as students undertake their feasibility studies. This can be done as a group one time meeting with all students or as a series of meetings arranged by the City and students.
- Be available for questions/discussions (by phone) during the due diligence phase particularly and throughout the semester.
- Grant access to the property and contact information for any abutting property owners if relevant.
- Attend and provide feedback to each student at a final meeting/presentation of their reports at which key City officials, including at least one elected official would attend. It is assumed this would be in the City of Frederick.

PALS Responsibilities:

- Cover expenses related to student and instructor’s travel to Frederick (three times).
- Public relations on press release for the feasibility studies produced by the students.

Tentative Timeline:

- **July-August** – Meeting with instructor and faculty advisor in preparation for the start of the course and orientation of the instructor and advisor to the site, data available and expectations of City officials.
- **September** – Start of course with initial site visit for students and instructors in mid-September.
- **October – November** – Students make a second visit (if helpful) to confirm data and meet with any additional officials or citizens to develop their draft chapters on entitlements and market analysis for their feasibility study.
- **Mid-December** – Presentation of feasibility student (10 – 15 minutes for each student’s proposal) to City of Frederick. Date TBD.
- **Early January** – Final Feasibility Studies will be delivered to the City of Frederick.
City Project: East Street Corridor  
Course Title (Number): Landscape Architecture, Urban Planning and Smart Growth in Frederick, Maryland (LARC 689F)

Faculty: Jack Sullivan  
Semester: Winter 2015  
Class size: 5 - 8  
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis  
Other city contact: Jeff Love  
Internal Constituencies: Engineering, Economic Development  
External Constituencies: East Frederick Rising, Bike Ped Advisory Committee, Frederick Bicycle Coalition, Frederick Peddlers, Washington Area Bicycle Association

Course overview: Landscape Architects have been at the forefront of smart urban planning and design since the beginning of the 20th Century. Notable landscape architects such as Frederick Law Olmsted, Jr., and John Nolan led the way to intelligent physical planning for building and landscape development in new and expanding communities across the country. Their appreciation and thorough knowledge of physiological and cultural conditions grounded projects for new towns, garden cities, urban villages, and major metropolises.

Landscape Architects, in their role as physical planners for sustainable urban development, need to have a basic understanding of landscape and transportation infrastructure, demographic characteristics, cultural traditions, real estate markets and trends, environmental best practices, design innovations and planning regulations, government participation, and community needs—present and future.

This course will focus on the interaction of landscape science (hydrology, geology, etc.) with the necessities and mechanisms of human settlements (transportation, economics, culture, etc.), advancing forward-thinking concepts for responsible urbanization and ecological balance. It will apply this knowledge to landscape analysis, recreational planning and design, alternative transportation initiatives, and community development, emphasizing resource management, spatial organization, landscape and building use and character, and the physical and social structure of community services.

PALS component: In this three-week intensive course (lecture and studio sessions will be held 4-to-5 days each week, 4-to-6 hours each day), students will be exposed to basic concepts in land use planning, zoning requirements, historic urban character and the potential for ecological urbanism. This course will use the North East Street Corridor and its surrounding neighborhoods as the focus for a planning study that will explore opportunities for improved landscape infrastructure and urban character, addressing transportation issues, economic advancement, and ecological responsibility. This course will be the first part of a two-part sequence. It will establish the background research, overall assessment, and framework for further, more detailed study in the spring semester Urban Design Studio (LARC 648).
**Course deliverables:** Students will assemble the collected context and site data, develop clearly articulated options for:

1. Recommended strategies for developing the North East Street Corridor and connecting to surrounding neighborhoods, anticipated development, and the city center.
2. A North East Street Corridor Master Plan that identifies the scope and character of business opportunities, alternative residential living scenarios, civic parks and open space improvements, and the integration of transportation and landscape infrastructure.
3. Phase One of the report (Phase Two will be completed in the spring semester) will be accompanied by an executive summary and a presentation of findings and recommendations to City officials at the end of the term. In the spirit of capturing the lessons learned and knowledge developed for the long-term benefit of the City, the report will include a description of methods, assumptions, and data sources.

**Student Learning Objectives:**

- Establish a firm understanding of methodologies for inventory/data collection, synthesis, and interpretation.
- Develop the ability to define and explain key terms and concepts in urban planning and design.
- Gain an understanding of policies and actions local governments can take to transform underused and visually compromised neighborhoods into ecologically sensitive, economically viable, and socially satisfying places of distinction.

**City Responsibilities:**

- Provide GIS mapping, transportation studies, and comprehensive master plan reports for Frederick and the sub-areas throughout the city;
- Remain available for questions/discussions related to reports and data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This will include several phone call between instructors and City during data collection phase, and 1-2 meetings between students and the City, including final presentation of findings.

**PALS Responsibilities:**

- Contribute to expenses related to printing and presentation materials
- Public relations on press releases for the students' reports

**Tentative Timeline:**

- **July-October** – Collection of data, including historic background (historic and current maps, photographs, etc.), evolution of development change, current surveys, demographics, current and proposed zoning, and plans for development of key sites throughout the city.
- **Monday, January 5, 2015** – Start of course with initial classes (January 5-9) focused on theoretical concepts, planning strategies, case studies, site introduction (including site visit), site analysis (natural and cultural history, existing conditions, character assessment, site development evolution, past and current zoning and land use, and opportunities and constraints for future economic, environmental, and cultural development). Students will
be assigned research and analysis tasks, share information, exchange and record perceptions, and format findings in a common document.

- **Monday, January 12-Friday, January 16** – Students are introduced to methods for translating and interpreting information, evaluating the layers of information that make up the complex meanings and definition of the city, developing concepts for urban form, integrating natural systems into the urban fabric and recognizing/establishing the natural environment as a prominent determinant in city form and character.

- **Monday, January 19: Martin Luther King, J., Day**—no class meeting.

- **January 20** – Student presentation of collaborative research, collective interpretation, analysis and synthesis, and individual initial studies to the City of Frederick and other guest critics (to be held at the University of Maryland, College Park). Feedback from reviewers will inform the development of “working” proposals, which will be due at the end of the week (January 23).

- **Wednesday, January 20-Friday, January 23** – Preliminary GHG inventory results are complete; students transition to mitigation planning evaluating different options for reducing GHGs within their sector.

- **Mid-January** – Report will be finalized and delivered to the City of Frederick after review by instructors, and additional writing as necessary (executive summary and methods).
City Project: Dev. Plan for the Airport vicinity
Course Title (Number): Graduate Architecture Design Studio (ARCH407)

Faculty Advisor: Jana Vandergoot
Semester: Spring 2015
Class size: 8 - 12 students
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis
Other city contact: Tim Davis
Internal Constituencies: Airport Commission
External Constituencies: East Frederick Rising

Course overview: ARCH 407 is a collaboration studio – that is, a studio that joins graduate students from Architecture with graduate students from Real Estate and Urban Planning to work collaboratively on a design project. The course introduces issues of field (architecture that reaches past its building envelop to shape landscape, ecology, culture, economy, and social behavior), environment, theory, tectonics, and assemblage. The course will address fundamental urban design theories and principles of sustainability.

Goals for this course include giving students an opportunity to interact with community stakeholders and practitioners. Using digital and social media to effectively correspond with and convey design ideas to a general audience is also a major objective of this course. This studio concentrates on problems and theories of urbanism and urban design techniques in the context of the city of Frederick and the State of Maryland. Issues and sites range from high-density urban in-fill to suburban and greenfield development in American and other contexts. Studio theories will explore such topics as Relational Planning, Event 2 of 3 Cities, Landscape Urbanism, Neo-Traditional design, Transit Oriented Development, density, sustainable development, building typology, and street design.

The course Arch 407 relies and builds upon principles of order, composition, and content as well as a working knowledge of architectural history, historical precedents, and basic cultural literacy developed in previous studios. The goal of the capstone course is to provide real estate development graduate students with an opportunity to apply acquired classroom knowledge to real world conditions.

PALS component: The project for the Spring 2015 semester is to work with community stakeholders and practitioners to come up with a plan for development of East Frederick, Maryland. Through early semester research exercises and a series of community-based design workshops ARCH 407 will explore relationships between cultural, social, and ecological systems in the built environment. Students in Design will work together as a studio to create a design vision for East Frederick that address environmental, social, and economic concerns. As the semester unfolds, students in Arch 407 will work separately to take a closer look at the Monocacy Boulevard site near the airport in Frederick. Students in Real Estate and Urban Design will work separately to create their own unique development proposal addressing the market analysis, entitlement process, design, construction and financing for the project.

Course deliverables: As a team, the Arch 407 students will produce a site plan for development in East Frederick. Students will also work separately to create more detailed plans for the development of the Monocacy Boulevard site. Each Real Estate student will produce a 30 – 50
page feasibility study, as well as a 10 minute power point presentation about their proposal for the site.

**Student Learning Objectives:**

- Students will develop understanding of urban design problems at a variety of scales and in a range of cultural contexts.
- Students will develop the analytical tools to graphically decode and describe urban contexts and representational skills necessary to communicate architectural ideas at urban scales not only to those in the discipline of architecture but also to the general public.
- Students will participate in community-based design and learn to interact with a real client on a real-world project.
- Students will develop an understanding of physical, cultural and historical aspects of existing sites.
- Students will refine the design thinking skills that facilitate intervention in many-faceted urban settings.
- Students will develop an understanding of regulatory, ethical and development concerns bearing on urban contexts.

**City Responsibilities:**

- City Liaison must meet with the instructors once before the semester begins to assure that the course will proceed as planned
- Participate in and encourage other community members to attend a Community Design Workshop that the students organize at the beginning of the semester. This workshop is a tool for gathering information, compiling community feedback, and kick-starting design. Ideally, the city of Frederick would also provide a venue for this event so that it can be open and easily accessible to the public.
- Meet with students, direct them and make available various city officials, including elected officials, as part of the due diligence during the entitlements process as students undertake their feasibility studies. This can be done as a group one time meeting with all students or as a series of meetings arranged by the City and students.
- Be available for questions/discussions (by phone) during the due diligence phase particularly and throughout the semester.
- Grant access to the property and contact information for any abutting property owners if relevant.
- Attend and provide feedback to each student at a mid-term and final meeting/presentation of their reports at which key City officials, including at least one elected official would attend. It is assumed this would be in the City of Frederick.

**PALS Responsibilities:**

- Cover expenses related to student and instructor’s travel to Frederick (three times).
- Public relations on press release for the feasibility studies produced by the students.
- Attend the early semester Community Workshop, the mid-term design workshop/review, and the final design review.

**Tentative Timeline:**

- **February** – Community Workshop in Frederick
- **March** – Mid-term Workshop/Design Review in College Park
- **May** – Final Design Review in College Park
City Project: Golden Mile
Course Title (Number): Planning and Design in the Multicultural Metropolis (URSP688Z) / Community Social Planning (URSP673)

Faculty: Willow Lung-Amam
Semester: Fall 2014 - Spring 2015
Class size: 20 per semester
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis
Other city contact: Brandon Mark
Internal Constituencies: Economic Development
External Constituencies: Golden Mile Alliance, DBED

Course overview: The geography of immigration has changed in recent decades. Once primarily centered on large urban areas, recent trends suggest that the fastest growing areas for new immigration are now occurring in suburbs, small cities, and even rural America.

Like many other small cities, Frederick, Maryland, has experiencing unprecedented immigration in recent years, particularly among those of Asian and Hispanic origin. According to 2010 US Census, approximately 15% of the Frederick population is currently of Hispanic, Asian, or mixed decent.

Many recently arrived migrants and the various small businesses that serve them have clustered along Frederick’s Golden Mile corridor. The Golden Mile is the popular name for a retail hub located along Route 40 West, which has long-served as the city’s vital gateway corridor. But as the corridor aged and lost a number of key retail anchors, it began to show signs of decline. In response, the city formed the Golden Mile Task Force, adopted a business tax credit program, conducted a series of resident and business studies, and in 2010, launched the Golden Mile Small Area Plan initiative to help revitalize the area.

The City’s effort to revitalize the Golden Mile will no-doubt impact the future of the many small, minority- and immigrant-owned businesses either positively or negatively. But in recent planning efforts, the City has not received a significant response from the immigrant residents or businesses located along the corridor about their redevelopment plans. The City of Frederick has partnered with the University of Maryland to create a program of education, outreach, and assessment to the minority- and immigrant-owned businesses along the Golden Mile with the goal of better engaging business owners, residents, and their needs the City’s redevelopment efforts.

PALS component: The University of Maryland has further partnered with Centro Hispano and the Asian American Center, two community-based immigrant-serving organizations with offices along the Golden Mile. The goals of the course are threefold:

1. Develop strategies for the City to better engage with minority and immigrant residents and businesses in the corridor;
2. Educate minority- and immigrant-owned businesses on city redevelopment plans, and engage their opinions about the city’s plans; and
3. Conduct a needs assessment of minority- and immigrant-owned businesses along the Golden Mile.
In partnership with these organizations and the City, University of Maryland faculty and students will, over the Fall 2014 and Spring 2015, administer a door-to-door needs assessment to all immigrant- and minority-owned businesses along the corridor; coordinate focus groups with business owners to educate them about the city’s plan and receive their feedback; and conduct a series of interviews with community and business leaders about the needs of minority- and immigrant-owned businesses and strategies for engagement.

**Course deliverables:** The information will be presented in a report and presentations to the City that will provide recommendations on engaging immigrant- and minority-owned businesses in their future development plans.

**Student Learning Objectives:**

- Demonstrate an understanding of important trends and forces behind the reshaping of geographies of race and immigration in the metropolis today, particularly in the Washington DC area.
- Articulate the ways that ethno-cultural diversity and immigration present both challenges and opportunities for planning and design scholars and practitioners.
- Engage thoughtfully with community organizations, residents, city officials, and other students around issues of race, urban inequality, and cultural difference and contribute creative planning and design solutions.
- Demonstrate self-reflexivity with regard to the ways in which issues of race, immigration, and inequality affect their own planning and design practice and scholarship.
- Demonstrate knowledge of effective planning and design tools appropriate in assisting small business development that are appropriate to the needs of immigrant- and minority-owned businesses.

**City Responsibilities:**

- Provide requested redevelopment plans and any city, business, and demographic data to UMD.
- Consult with UMD as needed throughout the process.
- Attend end-of-semester presentations where UMD student work will be presented.
- Attend community forums to present information to businesses, if requested.

**PALS Responsibilities:**

- Hire a Graduate Assistant to assist for at least 10 hours per week during the Fall and Spring.
- Assist in the coordination of small focus groups sessions, as necessary.
- Assist in coordination efforts with City for sharing final results and recommendations, including final presentation in both Fall and Spring.

**Tentative Timeline:**

**Fall 2014**

May – Sept  
UMD makes initial contact with organizations and appropriate city staff  
Sept  
UMD students and faculty visit with city staff, community partners, and tour Golden Mile
<table>
<thead>
<tr>
<th>Month</th>
<th>Activity Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct</td>
<td>UMD students, in coordination with community partners, conduct door-to-door outreach and needs assessment</td>
</tr>
<tr>
<td>Nov</td>
<td>UMD students, in coordination with community partners, host focus groups with businesses</td>
</tr>
<tr>
<td>Dec</td>
<td>Students present findings of stage 1 of the project to city staff and community partners</td>
</tr>
</tbody>
</table>

**Spring 2015**

- **Feb-Mar**: UMD students, in coordination with community partners, conduct interviews with community leaders
- **April-May**: UMD students organize and analyze data from the needs assessments, interviews, and focus groups and write a report to the City on results and recommendations
- **May**: UMD students host a forum to present results and recommendations to the city staff, businesses, community partners, and Frederick residents
City Project: Mapping Neighborhood Identities
Course Title (Number): Planning Technologies (URSP 688L)

Faculty: Chao Liu
Semester: Fall 2014
Class size: 15 - 20
Grad/Undergrad: Graduate

Primary City Contact: Joe Adkins
Other city contact: Matt Davis
Internal Constituencies: Planning, Mayor’s Office
External Constituencies: NACs

Course overview: Technological progress in the last three decades has had a tremendous influence on both practice and research in the field of planning. Emerging technologies for communications, computing, and visualization continue to fundamentally change how we plan, develop and manage cities. Technologies can be effectively used during the planning process for data collection and processing, spatial analysis, accumulation of experience and knowledge, information sharing, communicating planning concepts, engaging the public in the planning process, and visioning. Thus, planning professionals are increasingly expected to adopt new technologies to effectively work in the field. This course provides an introduction to several technologies used by planners, regardless of their substantive field (e.g. transportation, community development, urban design, etc.). Given the ubiquity of Geographic Information Systems in contemporary planning, there will be a considerable focus on developing analytical and visual GIS skills using both commercial and open-source software packages. Several other technologies and software packages will be introduced, including the underlying concepts and knowledge to evaluate a variety of technologies in order to select the best approach for particular tasks in the whole planning process. Hands-on experience will be emphasized in this class to have students acquire practical skills, as well as knowledge, so that they will be able to apply their skills to assignments and projects in other classes in the program and future work after completing the program. Students are also encouraged to create high-quality products (i.e. website, blog, twitter, wiki) on the internet through the course work, so that they can include them in a portfolio of technology projects to demonstrate to potential employers. Topics and technologies to be discussed include the following: web publishing and tools, search engine optimization, blogs, Twitter, GISs, visualization, mashups, social networking, web surveys, and photo/video sharing (web/video conferencing, Wiki).

PALS component: The course will offer an introduction to several basic technologies necessary for contemporary planners, as well as the conceptual knowledge to evaluate the utility of various technologies that support the planning process. With a strong emphasis on acquiring practical skills, the course will provide hands-on experience, fundamental concepts, and real-world applications in urban planning technologies. Students will work with the City of Frederick to apply different combinations of planning technologies that they learned in the class and create a neighborhood identity inventory and identify relevant policy implications based on the analysis.

Course deliverables: Students will be grouped into several teams to work on the final projects. Throughout the semester, students will gather the data for an area or subareas of the City. The final project report will include the follow components:

1. The process of how students gathered the data through GIS/QGIS, Open Street Maps, blogs, Facebook/Twitter, survey and/or interviews, and the photo/video, etc.
2. Different analyses on neighborhood identities in terms of social and cultural resources by using GIS mapping tools, social media network analysis tool, photo and video sharing tools, etc.
3. Suggestions for future studies and recommendations, strategies, policies, and challenges for the community engagement process for the City.

Student Learning Objectives:
- Understand the range of technologies available to planners in the context of planning.
- Understand the rationale and advantages for using technologies in planning.
- Identify the state of technology integration within planning practice.
- Experience firsthand usage of a wide range of technologies.
- Develop ability to think spatially and conduct spatial analysis, using ArcGIS and internet
- Develop a solid understanding of if and how technology is shaping the city of Frederick.

City Responsibilities:
- Identify certain neighborhoods in the City that will be analyzed for the course.
- Provide feedback on students’ interim and final project regarding data sources, methodologies, and deliverables.
- Provide scheduling and logistical assistance for the field trips, on-site interviews, on-line survey, video/photo collection, etc.

PALS Responsibilities:
- Cover expenses related to student travel to Frederick (twice).

Tentative Timeline:
- May-August – Coordinate with the City to finalize several neighborhoods as the candidate study areas
- September – Several classes will focus on the theoretical parts of the course. Students will be grouped into several teams to work on certain neighborhoods.
- October - November – Students work to gather data from different sources by using a variety of combinations of planning technologies. The instructor will check with the City to see if course addresses sufficient issues in terms of neighborhood identification.
- Early December – Group project presentations to the City. Presentations include analysis results, recommendations, and future research. The City will provide feedback on the project and student will work on final revisions on the project based on the feedback.
- Mid-January – Report will be finalized and delivered to the City of Frederick after review by instructors.
Course Project: East Frederick Rising Revitalization
Course Title (Number): Industrial Land Use Planning/Manufacturing Sustainability (URSP TBD – either 6 credit studio or 3 credit field course)

Faculty: Scott Dempwolf
Semester: Spring 2015
Class size: 8 - 12 students
Grad/Undergrad: Graduate

Primary City Contact: Matt Davis
Other city contact: Jeff Love
Internal Constituencies: Airport Commission
External Constituencies: East Frederick Rising, Inc.

Course overview: This course will examine industrial land use and mixed use conversion of industrial land in the context of proposed development. The East Frederick Rising plan contemplates significant mixed use growth and the land use succession of multiple industrial parcels and structures, many of which are still in use. While the area contains sufficient industrial land to accommodate all current and future industrial needs the succession of land uses may have significant and unanticipated impacts on two groups: current industrial land users and new manufacturing startups. Forcing existing industrial uses to move to new facilities will likely increase their space costs. Startups often seek out older “underutilized” industrial facilities where they can get cheap space and room to grow during the first few years of operation. This course proposes to undertake an industrial land use study for east Frederick to determine current conditions, likely impacts and planning options for the City to consider as it implements the East Frederick Rising plan.

PALS component: Under either the 6-credit studio or 3-credit field course there will be five phases to the project. During the first phase of the course students will become familiar with the project area from a planning perspective through the review of planning documents and presentations by city planners and others involved in planning, zoning and economic development of the area. They will become familiar with the project area from a physical perspective through area tours and site visits. An important component is to begin relating planning documents to actual physical conditions and activities on the ground. During the first few weeks students will also review background literature on industrial land use including prior ILU studies. The second phase involves two components. The first is to examine existing data on industrial activity and development in the area through several sources including Census, BLS, BEA and proprietary sources including CoStar and Implan. The second component in this phase is to become familiar with on-the-ground needs of industrial users through site visits to several industrial facilities and interviews with industrial land users (both within the project area and elsewhere). During the third phase students will: 1) evaluate the data, documents and other information and prepare a preliminary assessment; 2) identify specific sub-areas, parcels and potentially specific uses that need additional study. During the fourth phase students will design and conduct addition site investigations and analysis for targeted areas identified in phase 3. (The extent and duration of this work is the primary difference between what will be accomplished in a 6-credit studio or a 3-credit field course). The fifth phase involve final synthesis and production of the final report and presentation.

Course deliverables:

1. Industrial land use study for the East Frederick Rising project area.
Student Learning Objectives:

- Understanding of industrial land use as part of an integrated land use system and the activities related to production, distribution and repair that occur on industrial land.
- Understanding of the process and impacts of industrial land use succession and conversion to mixed use under various conditions.
- Gain familiarity with available data and tools including CoStar and Implan, and with methods of analysis relevant to ILU and economic development.
- Ability to perform an industrial land use study and to identify key issues for planners and elected officials related to industrial land and conversion to mixed use.
- Ability to design and conduct limited field studies.

City Responsibilities:

- Provide GIS data for land use analysis and mapping related to the problem.
- Provide reports and studies related to the existing problem.
- Participate in an initial project overview and tour of the project area.
- Help identify key stakeholders and businesses involved in the project or located in the project area and make introductions or provide notices to those individuals and businesses regarding student work.
- Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This will include several phone call between instructors and City during data collection phase, and 1-2 meetings between students and the City, including final presentation of findings.

PALS Responsibilities:

- Cover expenses related to student travel to Frederick.
- Coordinate with University public relations on any press release or information.

Tentative Timeline:

- **August - December** – Full course design & promotion
  - Meet with city officials to define detailed deliverables
- **January** – Finalize course, speaker and travel schedule; execute CoStar student agreements for students enrolled in the course. Students are introduced to the project. Commence phase 1.
- **February** – Phase 1 completed commence phase 2.
- **March** – Phase 2 completed; commence phase 3 (completion targeted for end of March beginning of April).
- **April** – Phase 3 completed; phase 4 completed. Commence phase 5.
- **Mid May** – Complete phase 5 and present results to the city. Report will be finalized and delivered to the City of Frederick after review by instructor, and additional writing as necessary (executive summary).
**City Project:** GHG Inventory  
**Course Title (Number):** The Carbon and Energy Economy for Planners (URSP 688R)  
**Faculty:** Sean Williamson, Gerrit Knaap  
**Semester:** Fall, 2014  
**Class size:** 8-12  
**Grad/Undergrad:** Graduate  
**Primary City Contact:** Jenny Willoughby  
**Other city contact:** Marc Stachowski or Joe Adkins  
**Internal Constituencies:** Engineering, DPW  
**External Constituencies:** NA

**Course overview:** Planners need to have a basic understanding of energy infrastructure and markets, the fiscal and social costs of energy, and how to evaluate problems with an energy component. With exposure to energy concepts, planners can begin to assess and manage carbon emissions as a key metric of community sustainability. Finally, planners should understand the long-term impacts of climate change in their community, vulnerable systems and populations, and actions that can increase resiliency. This class will explore, through an applied approach, a number of issues related to making cities and communities more adept in the new carbon and energy economy. We will examine carbon and energy issues through multiple disciplines with the goal of preparing planners for their critical and evolving role in the new economy.

**PALS component:** In the first half of the class, students will be exposed to basic concepts in energy and climate change science, economics, policy and planning. This portion of the course will focus on energy and carbon management concepts that fall within the domain of local governments and planners such as the imperative for local action and the roles and relationships among local governments, utilities, state and federal governments, and residents. In the second half of the class, students will work with the City of Frederick as we learn about their energy fuel mix, consumption patterns and costs, develop a carbon inventory, and make recommendations for reducing greenhouse gas emissions and advancing related sustainability goals.

**Course deliverables:** Students will be tasked with assembling a greenhouse gas inventory for Frederick-owned buildings, vehicles, and other GHG-emitting processes. Teams of students will be placed into one of three workgroups (i.e., buildings, transportation, and non-combustion) and asked to develop two inter-related pieces to produce a chapter within the City of Frederick GHG Inventory Report, including: (1) analysis and visualization of energy and carbon patterns as normalized into meaningful metrics (year-over-year changes, GHGs/unit of space, etc.), and (2) recommended strategies, policies, and technologies for reducing GHG emissions within that sector.

The report will be accompanied by an executive summary and a presentation of findings and recommendations to City officials at the end of the semester. In the spirit of capturing the lessons learned and knowledge developed for the long-term benefit of the City, the report will include a description of methods, assumptions, data sources, data gaps and challenges, and recommendations for future inventories.
Student Learning Objectives:

- Firm understanding of GHG inventory methodologies as well as a basic understanding of how to operate a GHG emissions calculator or tool (i.e., EPA’s Local Greenhouse Gas Inventory Tool).
- An understanding of policies and actions local governments can take to reduce GHGs (directly or indirectly) and an ability to justify and explain the process associated with implementing the policies/strategies in a given context.
- Ability to define and explain key terms and concepts in energy and climate change.

City Responsibilities:

- Collect activity data necessary to assemble a GHG inventory (e.g., electricity consumption, transportation fuel consumption, other energy sources, building characteristics, on-site renewable energy capacity, etc.).
- Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This will include several phone call between instructors and City during data collection phase, and 1-2 meetings between students and the City, including final presentation of findings.

PALS Responsibilities:

- Cover expenses related to (1) student travel to Frederick (at least once).
- Coordinate with University public relations on press release for the GHG report in the spring.

Tentative Timeline:

- **May-August** – Collection and cleaning of activity data from the City of Frederick, set up the Local Government Greenhouse Inventory Tool, finalize lesson plans and course assignments;
  - **Checkpoint:** Call with City of Frederick in late August to make sure all data pieces are finalized, and re-assess expectations given potential data challenges.
- **September** – Start of course with initial classes focused on theoretical concepts, students are introduced to the City of Frederick (including potential site visit), and are broken into groups to begin working on assignments.
- **October** – Students are introduced to GHG inventory tool and activity data, they are asked to execute the tool and provide supplemental analysis of results as an assignment; mid-term will conclude discussion of theoretical concepts.
  - **Checkpoint:** Student visit with City of Frederick in late October as transition to final class products and opportunity to become familiar with the City and ask questions to City officials.
- **November** – Preliminary GHG inventory results are complete; students transition to mitigation planning evaluating different options for reducing GHGs within their sector.
- **Early December** – Presentation of results to the City of Frederick by students including GHG inventory and recommendation of actions the City can take to mitigate emissions. Students submit chapter covering their GHG sector as final group grade.
- **Mid-January** – Report will be finalized and delivered to the City of Frederick after review by instructors, and additional writing as necessary (executive summary and methods).
City Project: Climate Change and the Frederick Watershed
Course Title (Number): Conservation Biology (CONS 670)

Faculty: Keryn Gedan
Semester: Fall 2014
Class size: 15 - 20
Grad/Undergrad: Graduate

Primary City Contact: Jenny Willoughby
Other city contact: Marc Stachowski
Internal Constituencies: Parks & Recreation, DPW
External Constituencies: DNR, Bike Ped Advisory Committee, Frederick Bicycle Coalition, Frederick Peddlers, Washington Area Bicycle Association, Potomac Appalachian Trail Club

Course overview: The course investigates interactions between people and the biotic and abiotic components of the Earth system, with a focus on the conservation of biodiversity. We examine environmental changes taking place at a planetary scale – climate change, disrupted nutrient and water cycling, species invasions, land use change and habitat loss, and the biodiversity crisis – and the human actions driving and combatting them. The course is organized in five parts: Biodiversity, Land use, Climate Change, Natural Resources, and Global Sustainability. Readings and class discussions address conservation in all biomes, terrestrial, freshwater, and marine. Course goals are: 1) To conceptualize the scale and reach of human impacts; 2) To understand current conditions relative to previous centuries and geological eras, 3) To evaluate approaches to avoid or mitigate environmental changes, 4) To develop research, writing, leadership, and communication skills, 5) To debate contemporary issues in conservation biology and familiarize students with their associated literature, and 6) To ensure environmental literacy at a graduate level.

PALS component: The PALS project will offer an opportunity for students to apply the concepts that they have learned about global environmental change at a local scale. Frederick owns and manages a large, 3000 ha forest lot, which provides freshwater to the city. Students will be tasked with examining how global change has impacted and will impact the area. Students will do some primary data collection, but rely heavily on literature review and information provided by Frederick City officials. They will be asked to make management recommendations for the Municipal Forest, which is managed by the Department of Public Works and the Maryland Department of Natural Resources Foresters for water supply and recreational purposes.

Course deliverables: Students will be asked to choose from three project options, all concerning global change factors affecting the biodiversity and ecosystem services provided by Frederick’s Municipal Forest. The three teams will need to periodically exchange information and findings with one another.

1. Project team one will map invasive species along trails within the Forest tract and will research the most prevalent invasive species to summarize their impacts and make management recommendations regarding trail maintenance and recreational activities within the forest.
2. Project team two will research past climate change impacts on the forest tract through interviews and data analysis.
3. Project team three will forecast the effects of future climate change on invasive and rare species and water supply in the Municipal Forest, given regional climate change predictions.

By the end of the semester, each team will produce a report of their findings with bulleted management recommendations.

**Student Learning Objectives:**

- A firm grasp of the regionally important invasive and rare species and regional past and predicted climate change.
- Understanding of the ecosystem services used by a city and steps that can be taken to steward ecosystem service provision.
- Experience with and exposure to data collection and analysis.
- The ability to do a scientific literature review and generate a professional synthesis.

**City Responsibilities:**

- Introduce and orient students to the Municipal Forest tract on a (weekend?) field trip.
- Provide the past and updated Forest Stewardship Plan to students (when available).
- Provide the course with Frederick City GIS data.
- Be available for students’ questions and provide advice on data collection and available data sources. Each team will require 1-2 phone calls and questions over email.

**PALS Responsibilities:**

- Cover expenses related to student travel to Frederick (once).

**Tentative Timeline:**

- **September** – students choose topics, form teams, read the Forest Stewardship Plan and gather other information about the Municipal Forest. Teams will define their interim project goals and data needs.
- **Late September**: Site visit to the Frederick Municipal Forest, introduction to the Forester and DPW representative / point of contact.
- **October** – Student teams synthesize available data and research literature on their topic, provide biweekly updates to the class.
- **November** – Teams draft final reports and management recommendations.
- **Early December** – Teams finalize reports and management recommendations and present to the Forester and DPW, and other interested City of Frederick officials. Students are graded on their final reports.
City Project: Carroll Creek Ecology
Course Title (Number): Green Infrastructure and Community Greening (LARC 452)

Faculty: David Myers
Semester: Fall 2014
Class size: 18 - 22 students
Grad/Undergrad: Undergraduate / Graduate

Primary City Contact: Jenny Willoughby
Other city contact: Joe Adkins
Internal Constituencies: Parks & Recreation, DPW, Engineering
External Constituencies: Friends of Carroll Creek Park, Downtown Frederick Partnership

Course overview: This course explores the contribution of green infrastructure (GI) elements in the built environment in contributing to ecosystems services and the sustainability of the built environment. The course explores the science, issues, challenges, and the policy, planning and design solutions offered by green infrastructure. The course emphasizes multiple scale and integrated approaches to those solutions. The course is divided into seven content areas: Process and patterns in the landscape; Direct and indirect factors of production; Drivers of human activity in the built environment; Human impacts and issues; Federal and state approaches to GI; County Approaches to GI; and Site approaches to GI. The increasingly important role of GI as a solution to non-point [re]-development pollution loading in the Chesapeake Bay is emphasized. This course is a series of lectures, guest lectures, presentations, readings and projects dealing with green infrastructure and community greening.

PALS component: In the first half of the class, students will be exposed to basic green infrastructure concepts. The first subject areas of the course focus on landscape process and patterns, a review of trends and the drivers/root causes of trends. In the second half of the class, students will continue to have lectures but will begin to work with the City of Frederick to 1) explore and document the ecology of Carroll Creek Park in relation to the problem of excessive algae growth in the creek; 2) explore and propose green infrastructure oriented as well as other solutions to mitigate excessive algae growth in Carroll Creek Park.

Course deliverables:

2. Inventory and analyze the problem. Teams may initially be organized by scale (e.g. landscape, community, habitat, and site) or land use (e.g. agriculture, park, residential, and stream). Depending on the approach, students will provide an analysis of each of the sectors’ potential contribution to the problem. Students will then

3. Recommend strategies, policies, and design and planning interventions for mitigating excessive algae growth in Carroll Creek Park.

4. The report will be accompanied by an executive summary and a presentation of findings and recommendations to City officials at the end of the semester

Student Learning Objectives:

- Ability to define and explain key terms and concepts in green infrastructure and community greening.
- An understanding of primary process and patterns of vegetation in Maryland.
• An understanding of state and local approaches in the implementation of green infrastructure approaches, tools and design and planning techniques.

City Responsibilities:

• Provide GIS data for land use analysis and mapping related to the problem.
• Provide reports and studies related to the existing problem.
• Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This will include several phone call between instructors and City during data collection phase, and 1-2 meetings between students and the City, including final presentation of findings.

PALS Responsibilities:

• Cover expenses related to student travel to Frederick (twice). The students will travel by van to the site and area.
• Coordinate with University public relations on any press release or information.

Tentative Timeline:

• **July-August** - Collection of GIS Data, reports and related studies;
  o **Checkpoint:** Call with City of Frederick in late August to confirm data.
• **September** - Start of course with initial classes focused on green infrastructure concepts, students are introduced to the City of Frederick (including potential site visit), and are broken into groups to begin working on assignments.
• **Late October** – Students are introduced to the project. Team approach is determined.
  o **Checkpoint:** Call/web conference with City of Frederick in late October to show some preliminary results and discuss structuring results/analysis to maximize effectiveness.
• **November** – Preliminary results of team products
• **Early December** – Presentation of results to the City of Frederick by students including inventory and recommendation of actions the City can take to mitigate excessive algae growth. Students will submit work as final group grade. Peer review will be conducted.
• **Late December** – Report will be finalized and delivered to the City of Frederick after review by instructor, and additional writing as necessary (executive summary).
Course Title (Number): Regional Design Studio (LARC 341)

Faculty: Christopher D. Ellis
Semester: Spring 2015
Class size: 18 - 22 students
Grad/Undergrad: Undergraduate

Primary City Contact: Jenny Willoughby
Other city contact: Marc Stachowski

External Constituencies: DNR, Bike Ped Advisory Committee, Frederick Bicycle Coalition, Frederick Peddlers, Washington Area Bicycle Association, Potomac Appalachian Trail Club

Course overview: LARC 341 examines the landscape architect's role within the interdisciplinary regional design field incorporating GIS technologies, spatial modeling, and the regional design process. Students investigate and record the environmental context of a large scale—frequently watershed scale—problem including the characteristics of soils, slopes, natural drainage systems, plant communities, wildlife habitat systems, and other sensitive areas. Students also examine the cultural context of a design problem identifying land uses, private and administrative boundaries, circulation systems, and recent/projected changes. Where appropriate, students will engage stakeholders and generate alternative solutions aimed at optimizing stakeholder needs while minimizing and managing conflicts.

The course uses the studio method of instruction which is a traditional learning-by-doing approach to design learning. Students are assigned projects to be explored under the observation and supervision of a studio instructor who assists in defining critical issues and formulating approaches to discover design problems and develop possible solutions. The studio an important learning environment in design education and student progress is assessed on the basis of their commitment and discipline in using it effectively.

PALS component: LARC 341 will assist Marc Stachowski and the Ad Hoc Team with the Recreational component of the Watershed Stewardship Plan Revision. Students will work in groups to examine the needs of the various stakeholders represented on the Ad Hoc Committee and work with the stakeholders to develop sub-master plans for each that meet with the approval of the Committee. The sub-master plans will respond to criteria established by existing plans and regulatory agencies, the Ad Hoc Committee, published best practices (e.g., IMBA Trail Building Specifications) and the stakeholder representatives.

Two content areas that were listed in the original PALS project description but will be address separately (not as part of the LARC 341 course) include studying:

- The economies of the forest to allow the City to receive the best return on the land
- Creating a watershed master plan

Course deliverables: Students will be tasked to produce a written and illustrated report that includes an executive summary, introduction, review of existing plans/regulations and other constraints, approved master plans for each stakeholder group, summary/conclusion, appendices for important resources, and a list of cited references.
Student Learning Objectives:

- How to investigate and record the environmental context of a 7,000 acres watershed, including the characteristics of soils, slopes, natural drainage systems, native plants communities, and wildlife habitat systems, and other sensitive areas.
- How to investigate and record the cultural context of a watershed, including transportation systems, private and administrative boundaries, recent/projected changes, and current land uses.
- How to use information resources available for analyzing natural and cultural processes that influence landscape planning and design.
- The application of design technologies that support landscape planning and design including geographic information systems.
- Techniques and approaches to organizing and presenting environmental themes and parameters that guide planning and design decision-making.
- How to coordinate design teams for collaboration in developing and communicating ideas and concepts.

City Responsibilities:

- Provide GIS data for watershed analysis and mapping related to the problem.
- Provide reports and studies related to the existing problem.
- Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This may include conference calls between instructors and City throughout the project, and 2-3 meetings between students and the Ad Hoc Committee, including final presentation of findings.

PALS Responsibilities:

- Cover expenses related to student/faculty travel to Frederick as needed. The students will travel by van to the site and Ad Hoc Committee meetings.
- Schedule meeting times for students to interact with Ad Hoc Committee.
- Coordinate with University public relations on any press release or information.

Tentative Timeline:

- **Summer** – Collection of GIS Data, reports and related studies; Ongoing communication between faculty member and Ad Hoc Committee Chair.
- **Fall Semester** – Faculty member meets with Ad Hoc Committee to get acquainted and discuss ideas for recreation master plan. Minutes of ongoing Ad Hoc Committee meetings are shared with faculty member; Ongoing communication between faculty member and Ad Hoc Committee Chair.
- **March (after 23rd)** – Studio class tours the watershed followed by meeting with Ad Hoc Committee. Ad Hoc Committee will provide guidance to the studio class for needs preparing a master plan report. Meeting will include discussions with individual stakeholders.
- **April** – Students will meet with Ad Hoc Committee to present draft master plan recommendations. Draft plans will subsequently be revised based on feedback by the Ad Hoc Committee.
- **May (prior to 12th)** – Final presentations of master plans and distribution of final report.
**City Project:** Climate Change Resilience and Adaptation  
**Course Title (Number):** Climate change adaptation and security (PUAF 798W)  

**Faculty:** Anand Patwardhan  
**Semester:** Spring 2015  
**Class size:** Limited to 20 students  
**Grad/Undergrad:** Graduate  
**Primary City Contact:** Jenny Willoughby  
**Other city contact:** Joe Adkins  
**Internal Constituencies:** Dept. Public Works-Utilities  
**External Constituencies:** N/A

**Course overview:** Adaptation is growing in importance as a key element of climate policy in both developing and developed countries and in the multilateral negotiations on climate change. The increasing importance of adaptation is underscored by the fact that many communities and countries are already at risk due to climate-related natural hazards, and given the (lack of) current progress in mitigation efforts, the world will likely experience a significant degree of climate change. Apart from direct impacts on socio-economic sectors and systems, climate change can exacerbate existing environmental stresses and conflicts over resource use. These are often a source of conflict, and therefore climate change has also been recognized as a potential threat to human security.

As a domain of study adaptation is emerging from a research topic to a field of practice. Tackling adaptation issues requires an interdisciplinary foundation based on concepts from the natural and social sciences and a combination of technical and analytical skills for assessment and evaluation.

**PALS component:** The course includes a term paper component. This component will be structured as an individual or group (depending on student enrollment) project. Individual projects will address specific climate risks in the context of Frederick, and will examine options for building resilience. Students will apply techniques for vulnerability & adaptation assessment for undertaking this task. By doing so, students will gain an appreciation of climate change adaptation at the city-level and the issues in building resilience at that scale. Climate risks that will be addressed will include: heat stress (and coping with temperature extremes), water stress and storm-water management. The final set of climate change related risks to be examined will be determined in consultation with the city in the Fall.

**Course deliverables:**

1. An assessment of the identified climate risks  
2. An assessment of possible options to strengthen city resilience to climate change

**Student Learning Objectives:**

The course will provide (a) a basic foundation of concepts related to climate change impacts, vulnerability, risk and adaptation; (b) specific skills and tools needed to identify, evaluate and plan adaptation interventions, such as impact & vulnerability assessment, and use of metrics and indicators, and (c) insights into putting adaptation into practice through mainstreaming and integration in different decision-making and planning contexts. The multilateral and global response on adaptation as reflected in the on-going climate negotiations will also be covered.
Adaptation is a cross-sectoral, cross-cutting issue, and therefore the course will be of relevance not only to individuals interested in environmental policy, but also social and development policy.

The course will enable participants to gain a working knowledge of relevant concepts to engage in the national and international debate on climate change adaptation. They should be able to contribute to analysis and assessment activities in support of adaptation. The course can also serve as the foundation for further research in the area of adaptation.

**City Responsibilities:**

- City liaison must meet with the instructor once before the semester begins (during Fall 2014) to ensure that the course will proceed as planned. Identify and finalize the set of climate change risks to be assessed by the students during the course.
- Ensure that relevant city-level data are available and made accessible to students, and enable students to access relevant stakeholders during the semester.
- Be available for questions/discussions (by phone) for the duration of the semester.
- Attend and provide feedback to each student at a final meeting/presentation of their reports at which key City officials will be present.

**PALS Responsibilities:**

- Cover expenses related to student and instructor’s travel to Frederick (three times).
- Provide support for primary data collection – consisting of interviews, possible online surveys administered through surveymonkey.
- Public relations on press release for the feasibility studies produced by the students.

**Tentative Timeline:**

- Fall 2014 – Identification of climate change risks and topics for student projects
- February – Initial student visit, allocation of project topics to students
- March – Student data collection and scoping study presentation
- April – Identification and evaluation of adaptation options
- May – Presentation of final reports on climate resilience
City Project: Industry Analysis
Course Title (Number): Management Consulting (BUMO 758K–BA01)

Faculty: Protiti Dastidar
Semester: Fall 2014
Class size: 30
Grad/Undergrad: Graduate

Primary City Contact: Richard Griffin
Other City Contact: Donna Goff
Internal Constituencies: TBD
External Constituencies: TBD

Course overview: This course offers an in-depth overview of the management consulting industry. Topics include the structure, conduct and performance of the management consulting industry; firms in the industry and their competitive strategies; problem-solving, communication, and client relation skills that are necessary for success in the industry; management consulting careers; ethical issues facing management consultants; and a real-world consulting project.

PALS component: In-class sessions aim to help students understand the dynamics of the management consulting industry, build critical and transferrable management consulting skills, and build real-world consulting experience by working with a client.

Students will be divided into teams of about 4 students. There will be approximately 6 teams total. Three teams will be assigned to each of the below projects.

Project #1: Annual Conference Project: Students will focus on analyzing and developing recommendations for entering the annual conference space. As part of this project, students will research where annual conferences are currently taking place, what attracts conferences to specific cities, and will develop lodging and accommodation recommendations for the City of Frederick in order to become an attractive conference destination.

Project #2: Municipal Airport Project: Students will conduct a competitor analysis of corporate airports in the state to better understand what factors impact corporations’ airport selection. Also, the project will entail interviewing companies which are currently using the Frederick Municipal Airport to better understand their primary reasons for choosing Frederick. The goal of this project is to determine how the City can make the Frederick Municipal Airport the number one corporate airport in Maryland.

Course deliverables: The final report will likely be accompanied by an executive summary, a presentation of findings and recommendations for the City. Also, depending on the projects selected by students, the course products are still being finalized, but may include:

1. Industry Analysis, including benchmarking and competitor analysis
2. Recommended strategies

Student Learning Objectives:

- Understand the dynamics of the management consulting industry
- Build critical (transferrable) management consulting skills:
  - Break up a complicated problem into logical, independent pieces
o Synthesize information to drive key conclusions
o Develop specific recommendations among a range of feasible alternatives
o Present recommendations and conclusions to persuade and gain buy-in
o Influence others effectively using a range of ethical tactics
• Gain real-world consulting experience, interact with actual businesses and produce deliverables by a deadline

City Responsibilities:

• Collect and connect students to data, documents, and contacts that will help them to complete a successful analysis
• Remain available for questions/discussions related to data uncertainties, operation and maintenance practices, and deliverable designs and recommendations. This will include bi-weekly phone calls between the faculty, City, and students
• Respond to students and faculty in a timely manner throughout the semester

PALS Responsibilities:

• Cover expenses related to (1) student travel to Frederick, and (2) student project expenses

Tentative Timeline:

• **Mid-October** – Term begins. Students meet with clients and begin statement of work
• **November**– Mid-term presentation
• **Mid-December** – Students complete their final deliverables
PLACE HOLDER FOR:

City Project: Renn Farm (master's thesis project)
Course Title (Number): NA
Faculty: David N. Myers
Student: Seth Flemming
Semester: Fall 2014 – Spring 2015
Grad/Undergrad: Graduate
City Project: East Street corridor ROW improvements (master’s thesis project)
Course Title (Number): LARC 799: Master’s thesis Research

Faculty: Byoung-Suk Kweon
Student: Jun (Sherry) Jiang
Semester: Fall, 2014 - Spring, 2015
Grad/Undergrad: Graduate

Primary City Contact: TBD
Other City contact: TBD
Internal Constituencies: TBD
External Constituencies: TBD

Project overview:
Jun Jiang will use the East Street Corridor right-of-way improvements project as her master’s thesis research. She will work with Dr. Kweon to create a site plan with sidewalks, street trees and pedestrian improvements. She will also investigate the city’s ongoing projects and a rails-to-trails project, and create a plan that could include road diets, multimodal use, sidewalk and rails with trails connections.

Project deliverables:
1. Literature review on streetscape
2. Site Inventory and site analysis
3. Design program, design concept
4. Site plan, sections/elevations, perspectives
5. Some construction details

City Responsibilities:
- Provide existing data, documents and regulation.
- Remain available for questions/discussions related the project, etc, etc.

PALS Responsibilities:
- Cover expenses related to student travel to Frederick, etc, etc.
- Coordinate with the City of Frederick, etc, etc.

Tentative Timeline:
- August: Thesis proposal
- September – October:
  o Information gathering
  o Interview with important stakeholders
  o Literature review and case studies
- November:
  o Site Inventories and site analysis
  o Design program and conceptual design
- December: Preliminary design
- January-February: Design development
- March: Design production
- April: Project delivery and presentations
City Project: Frederick Oral Histories
Course Title (Number): Metropolitan History as American History (HIST408B)

Faculty: David Freund  
Semester: Fall 2014  
Class size: 12  
Grad/Undergrad: Undergraduate

Primary City Contact: TBD  
Other city contact: TBD  
Internal Constituencies: TBD  
External Constituencies: TBD

Course overview: This seminar introduces topics in the political, economic, social, and cultural history of U.S. metropolitan regions since the mid-19th century. We will examine a series of often gradual but large-scale changes in American society, including the growth and transformation of the market economy, the evolution of government policy, the transformation of the American countryside, patterns of immigration and migration, the impacts and uses of technological innovation, changing patterns of work and leisure, and ever-shifting popular ideas about what it means to live in a city, a suburb, or their hinterlands. Throughout the semester, we will explore the multiple forces that have shaped metropolitan development and the ways that different groups of people, in both the public and private sectors, have responded and adapted to urban change. And we will ask if a “metropolitan” focus—indeed, a metropolitan perspective—on modern U.S. history alters any of our common assumptions about that history.

PALS component: Students will have the option to fulfill the course’s final paper assignment by conducting and writing-up oral histories of Frederick’s development history.

Course deliverables: This is a capstone readings course in the Department of History for majors. Students engage the long history of metropolitan development in the U.S. (since the mid-19th century), through a combination of secondary and primary sources, and prepare a final project that considers recent development issues in the context of that long history.

Student Learning Objectives: At the end of the course students will have the following skills and knowledge:

- A working knowledge of the variables that have shaped metropolitan development and the wide of range of individual and group metropolitan experiences. The course places special emphasis on the impact of private and public practices and the ever-changing relationship between private institutional decision-making and public policy.
- Ability to define and explain key terms and concepts in metropolitan development politics.

City Responsibilities: The City’s responsibilities will include the following:

- Provide participants in the oral-history project with contact information, background on the subjects, and suggestions about (or perhaps access to) materials that will enable students to contextualize their interviews.

PALS Responsibilities:

- Cover expenses related to student travel to Frederick.
**Tentative Timeline:** The timeline for HIST 408B students who choose to participate in the project:

- **September** – students declare their interest in participation and discuss possible interview subjects and background materials with the city.
- **October/November** – Students complete background work and interviews.
- **November/December** – Students transcribe and “report” on interviews, combining the collected materials with 1) materials specific to Frederick and 2) course readings on 20\textsuperscript{th} and 21\textsuperscript{st} century development politics to draw larger conclusions concerning topics including: patterns of growth in late 20\textsuperscript{th} century Frederick; comparisons of Frederick’s development to other similar urbanized areas in the U.S.; the role of specific private and public actors in the development process.
City Project: All PALS Projects (as selected by students)
Course Title (Number): Feature Writing (JOUR371)

Faculty: Marlene Cimons
Semester: Fall 2014
Class size: 18
Grad/Undergrad: Undergraduate

Primary City Contact: Joe Adkins
Other city contact: Matt Davis
Internal Constituencies: Public Information Officer
External Constituencies: News Agencies

Course overview: This is an elective course within the College of Journalism. The goal is to teach young journalists how to report and write feature stories. News features usually evolve from breaking news, and often are related to current events. Features give journalists the opportunity to be creative, to use all of their senses to convey a trend, the essence of an individual, a compelling narrative or to chronicle an unfolding story. They build upon solid reporting of news by going beyond the events and giving the reader something more and/or something different. They tell the tale in depth, or in a different way. They give the journalist the chance not only to be a reporter, but to be a writer. All of the skills that they have mastered thus far – how to report and write the news – come into play when writing features – and then some. The emphasis in this class is both on advanced reporting and on writing style. Feature writing has certain standard elements, but also provides for individual style and expression. The course requires a serious commitment to reporting, research, and especially to writing – and rewriting. Most journalists love writing features, and - not surprisingly - readers love reading them.

PALS component: Students learn to write by writing. Thus, the course requires them to report and write four stories throughout the semester. The final story, which is a major part of their final grade, will be an in-depth look at one of the Frederick projects. By in-depth, it will require the students to conduct a considerable number of interviews and to visit the actual sites. (I cannot require them to visit the sites, but the stories likely will suffer if they don’t. So I hope we can find a way to facilitate a couple of trips for them.)

Course deliverables: Students will write an in-depth story concentrating on one of the Frederick sustainability projects. They will be working on it throughout the semester, but it will be due one week after the final class. The best ones will be offered to either Capital News Service (the college’s student run news service) or LiveScience.com, where the course instructor edits and provides copy for the expert voices fact-based op-ed feature page.

Student Learning Objectives: At the end of the course students will become better writers and reporters and (for the purposes of the PALS project) learn something about sustainability and its importance.

City Responsibilities: The city will make its relevant officials available to students for interviews and be accessible on site for visits, etc.

PALS Responsibilities: Assisting with student travel to and from Frederick for those without transportation and reimbursing trip expenses for those that do.

Tentative Timeline:
September – Choose a project from the list for final story
October – Conduct reporting, including site visits
November – Conduct reporting, including site visits, begin writing
December – Story due one week after final class

**Note:** A PALS representative will speak to Marlene’s class as early as the second week (the class meets once/week, Tuesdays from 4 p.m. 6:45 p.m., Knight 2107) to provide an overview of the projects.
City Project: All PALS Projects (as selected by students)  
Course Title (Number): Advanced Video Storytelling (JOUR 368v/668v)  
Faculty: Bethany Swain  
Semester: Fall, 2014  
Class size: 7 - 10  
Grad/Undergrad: Undergraduate (possibly Graduate in JOUR 668v)  
Primary City Contact: Matt Davis  
Other city contact: Lance Duval  
Internal Constituencies: NA  
External Constituencies: NA  

Course overview: The class will learn advanced storytelling, shooting, editing and reporting techniques for multiplatform video. The team will grow the award-winning ViewFinder brand and produce themed projects. Each team member will research, setup and create character-driven, natural sound packages representing a variety of voices and perspectives on the topics. Students will practice and refine their skills with assignments to help them learn how to shoot, produce, promote, brand and edit a show. Additionally, the ViewFinder team will collaborate with other capstone classes and units. Each student will have a leadership role with an aspect of the productions, such as updating the ViewFinder website, editing the show teases or anchoring the productions. The final ViewFinder projects will be shared at a public screening with invited guests. Wherever possible, the class environment will reach for professional journalism standards and practices, with the goal of preparing students for the next steps in their careers. This class will require a substantial amount of time management skills and should be very rewarding.  

PALS component: The students will research, shoot, write, edit and produce video stories from Frederick or themes related to Frederick. The students will work as student journalists to find compelling aspects related to the PALS theme that work as video stories.  

Course deliverables: As outlined above, students will research and work to produce video stories.  

1. Students pitch 4-8 video stories and work to produce the approved pieces to the production standards expected of a professional local news station or innovative start up.  
2. The pieces that meet the required production standards will be published online. All aspects of the PALS project and City of Frederick can link to the published videos. Upon request, copies of the pieces will be made available for PALS presentations, etc., but whenever possible, they should use the published links.  
3. The team will work to edit the pieces into a show that the students host in Frederick. The show will be published online and available to air on UMTV.  

Student Learning Objectives:  
- Learn how to work on a collaborative project with different units  
- Students improve their reporting and video production skills, with stories for their resume reels  
- Work in an environment similar to a professional local news station or innovative start up
City Responsibilities:

- Acknowledge interview requests and treat as they would from a valued local news station
- Send any potential story leads, interesting aspects, or other ideas for consideration to student journalists.
- As the students will be working as student journalists, the City will not have editorial control over the content produced.

PALS Responsibilities:

- Cover expenses related to student travel to Frederick.
- Cover expenses of basic production supplies, such as SD cards. Wish list available upon request.

Tentative Timeline:

- **July-August** – PALS team provides a list of projects under development and any other noteworthy information.
- **September** – Students start research on potential stories, and pitch their video project ideas to instructor. Once approved, the students start production of the stories. The rest of the timelines will depend on the stories. Students will post social media updates on behind the scene aspects of their productions.
- **December** – By the end of the semester, and hopefully earlier, the students will have their final videos posted online.
PLACE HOLDER FOR:

<table>
<thead>
<tr>
<th>Category</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Project:</td>
<td>Latin Certamen</td>
</tr>
<tr>
<td>Course Title (Number):</td>
<td>NA</td>
</tr>
<tr>
<td>Faculty:</td>
<td>Judy Hallett</td>
</tr>
<tr>
<td>Semester:</td>
<td>Fall 2014</td>
</tr>
<tr>
<td>Class size:</td>
<td>UNK</td>
</tr>
<tr>
<td>Grad/Undergrad:</td>
<td>UNK</td>
</tr>
</tbody>
</table>
Course overview: The City of Frederick, as part of updating their Sustainability Plan, would like recommendations to get residents & commercial customers of Frederick to embrace composting as part of their daily waste stream practices. This course will focus on three main components to develop that plan: marketing, implementation & end product usage. Students will understand the long-term impacts of waste stream management in terms of both environmental and economic sustainability. Using human-centered design theory, students will research background materials in public perception, community engagement, other municipal composting systems and possibilities for the end product usage given the limitations of the local facilities. We will examine the factors involved in the cultural adoption of new systems, especially those related to sustainability issues. A key foundation of the course is the importance on drawing from multiple disciplines, paying particular attention to public input, to create a more comprehensive & effective plan.

PALS component: Students in this course will be divided into three types of teams: marketing, implementation & end product usage. Each group will be incorporating research with design theory and then coming together as a whole class to create feasible recommendations for the city. In the first third of the course, students will be introduced to the design thinking process, as well as taking a deep dive into the broader view of assessing and managing organics recovery as a key metric of community sustainability. Specifically, we will become “instant experts” on composting, behavior change theories & techniques, processing food waste and the concept of urban and city planning. The second third of the course will focus on applying concepts & knowledge learned thus far to implementing one full cycle of the design process in order to develop a draft action plan. This includes site-visits and surveying residential and commercial customers to discover the needs of both the community and the municipality before creating final recommendations. The last third of the course, will test prototyped marketing tools, collection techniques & end products as developed thus far and suggest improvements based on results. After a round of testing, teams will integrate their respective parts to create system-wide recommendations that would complement the GHD Feasibility Study.

Course deliverables: Students will be tasked with developing a list of recommendations to determine how to best encourage residents & commercial customers of Frederick to embrace composting as part of their daily waste stream practices. Teams of students will develop & test prototypes of marketing tools, collection techniques and end product usage options. As a final product they will integrate their findings into a final recommendation report & presentation which will include an assessment of the trade-offs of adopting the various methods & techniques developed. The report will include a description of methods, assumptions, data sources, data gaps and challenges; as well as what was learned about public perception of a city-wide composting program.
City Responsibilities:

- Providing course faculty with necessary background & project data to allow for a realistic deliverable, including:
  - Update on the GHD Feasibility Study, if applicable
  - Updates on the city’s progress on implementing equipment for Food Waste Digestion at the City of Frederick’s Gas House Pike Wastewater Treatment Plant
  - Updates for proposed plans and uses for the end-products
  - Recommendations for commercial and public sites for prototype developing and testing
- Be available for:
  - Questions related to the ideas being developed in the course (both via phone & email)
  - 2 meetings between students and relevant city officials, including a needs assessment from city officials & a final presentation of findings

PALS Responsibilities:

- Cover expenses related to student travel to Frederick (2-3 times)
- Coordinate communication between City of Frederick officials and course faculty
- Coordinate with University public relations to issue press release, if applicable

Tentative Timeline:

- June-August:
  - Faculty & city officials meet to determine initial needs assessment & course design;
  - Scout out appropriate sites for student prototype development and testing
  - Identify and finalize course faculty duties
  - Create initial draft of syllabus
  - Initiate GenEd course proposals
- September-November:
  - Finalize syllabus, assignments, lesson plans
  - Market to students to get adequate enrollment for a spring course
- Late January - February:
  - Initial meeting with students and city officials
  - Learn foundational concepts for the course & do background research, including investigating other municipal models of Food Waste Digestion systems
- March – April:
  - Implement design-thinking process by developing the prototype models for the 3 main components of the course
  - Site-visits & community needs assessment
  - Testing of prototypes
- May:
  - Student report & presentation to City of Frederick officials
  - Final report from instructors to City of Frederick officials – to incorporate revised student recommendations and input from city officials at student presentation
**City Project:** Economics of Historic Preservation  
**Course Title (Number):** Historic Preservation Economics (HISP680)

**Faculty:** Constance Ramirez  
**Semester:** Fall 2014  
**Class size:** 8  
**Grad/Undergrad:** Graduate

**Primary City Contact:** Lisa Mroszczyk Murphy  
**Other city contact:** Joe Adkins  
**Internal Constituencies:** TBD  
**External Constituencies:** TBD

**Course overview:** HISP 680 introduces the student to the economics of historic preservation and the financial techniques used to encourage the preservation of historic properties. The course addresses issues such as measuring the economic value of historic places, determining whether a historic place is economically sustainable, identifying the economic system needed to preserve a historic place, and the role of government. It will look at historic places as they relate to market forces of real estate, tourism, and economic development and as they are affected by government programs carried out through grants, regulations, and acquisition. The course is intended to provide the student with an appreciation of the fundamental role of economics in historic preservation decisions and to prepare the student to understand the effect of market forces on historic preservation.

The class will focus on the economics of the historic district of Frederick, MD, in order to assist citizens in understanding how the historic district contributes to the economic base of Frederick through creation of jobs, property values, and wealth. Research on specific economic activities of tourism, rehabilitation, and retail sales will be used to identify the sources and size of economic contributions being made by historic preservation activities to the economic base of Frederick. This will also include a review of the historic district regulations and their effect on economic factors. A final report will be prepared for the City of Frederick which can be used to educate and inform citizens and property owners in the historic district and make recommendations on how Frederick could increase the economic benefits of its historic district.

For the students, the larger goal of this class is to understand, through the Frederick examples and analysis, the economic systems within which historic places operate and to understand the tools to analyze the sustainability of an economic system with current market and government activities in an historic area.

**PALS component:** The class will undertake readings and discussions which provide the background in historic preservation economics of historic places and local communities relative to Frederick. They will tour Frederick and select a historic place or activity (tourism) to research. Population, economic, and historic place data about the city will be identified and analyzed. Individual studies of components of the Frederick historic district will lead to an economic benefits analysis. The individual reports will be used to provide a quantitative overview of the economic benefits of historic preservation with the individual papers (edited) serving as case studies in sidebars or appendices.

**Course deliverables:** A report that provides an overview of the economic benefits of the historic district of Frederick to the local economy based on data derived from an examination of various historic preservation activities including investments in construction in the historic district.
(including rehabilitation), tourism programs, and public expenditures and the resulting changes in property values and tax base.

**Student Learning Objectives:**

- Understand how historic places contribute to a local economy.
- Identify the economic effects of government programs, e.g., local historic district ordinances.
- Examine methods for stimulating historic preservation activities, e.g., government programs and taxes.
- Be aware of the costs of historic preservation and who pays, e.g., costs to property owners of historic district requirements;
- Consider how to measure the value and/or benefits of historic places.
- Apply the case studies from Frederick to other communities.

**City Responsibilities:**

- Provide two City staff members to meet with the class.
- Assist students in identifying properties which have received a Federal and/or State tax credit.
- Identify business owners whose retailing is related to tourism.
- Provide city budget information for at least 2011-2013.

**PALS Responsibilities:**

- Cover expenses related to student and faculty travel to Frederick (twice).
- Assist, if necessary, with travel expenses for (3?) visiting speakers from Frederick to College Park.

**Tentative Timeline:**

- **September** – The class meetings are devoted to acquiring a background in historic preservation economics.
- **October** – City staff attend classes and provide information about the historic preservation activities in Frederick; students begin collection of data about economic activities in the historic district of Frederick; and students have a field trip to Frederick (might be moved to September).
- **November** – Students prepare individual papers on an economic activity and present their findings in class.
- **December** – Students jointly develop an overview and summary of their findings in a report for the City of Frederick.