Cover photo features a picture of Phoenix Park in summer
Research Projects

Project Title: Geo-spatial Planning and Design for Camden’s Green Infrastructure
PI: Mahbubur Meenar
Sponsor: Camden County Municipal Utilities Authority (CCMUA)

Project Title: Listen. Record. Play. Audio Storytelling for Equitable Placemaking and Park Design in Camden, NJ
PI: Jennifer Kitson, Co-PIs Mahbubur Meenar and Megan Bucknum
Sponsor: Rowan University Research Experience for Diversity and Inclusion (REDI) grant

The first project, which is funded by the CCMUA, is a green infrastructure community planning project centered in the South Waterfront neighborhood of Camden. In the past, the CCMUA contributed environmental harms in the community, primarily through odor pollution generated from processing sewage for half a million people in Camden County, but today, the CCMUA has become a leader in creating environmental benefits in Waterfront South and the rest of Camden through green infrastructure designed for stormwater management and much needed greenspace for residents.

The second project, sets out to enhance traditional community planning tools with audio-based methods that give greater ‘voice’ to participants. This project is focused on one new CCMUA greenspace named Phoenix Park which provides, for the first time, residents access to the waterfront.
Oral storytelling for environmental history & injustice

Amplifying Voices
Local stakeholders and residents narrate the environmental history, injustice and significance of Phoenix Park in their own words and voices

Polyphonic (multi-voiced) Listening
Students listen, learn and explore the lived experience in place from different stakeholder perspectives, past and present

Audio Story Capture
- Oral history
- Audio intercept interviews
- Park voicemail

This slide provides an overview of oral storytelling and its connection to environmental justice. The bullet points and images offer context for the audio clips students can listen to.
about Waterfront South
• Camden is the poorest city in NJ and one of the poorest in the nation
• The Waterfront South neighborhood has poverty and unemployment rates higher than the city overall
• Camden was home to the massive New York Shipbuilding Company (1899-1968) and the Waterfront South in particular remains a major industrial site
• As a result, the area has suffered decades of environmental degradation
• Particularly, Waterfront South was until relatively recently harmed by the odor pollution from the CCMUA's sewage treatment plant

This slide provides some brief context about the environmental history of Waterfront South. Students will be researching this further, so this account is purposefully brief.
For the past two decades, the CCMUA has significantly reduced odor pollution and now seeks to be a positive force in the community.

In 2014, the CCMUA partnered with other state and local organizations to remediate a site adjacent to their plant. The site was formerly a factory that processed minerals (limestone, for example) into chalk. It had been abandoned for several decades. The remediation of the site was completed in 2017 and became Phoenix Park.
about Phoenix Park
This slide showcases the location of Phoenix Park in relation to the surrounding area.
An early design drawing of Phoenix Park
This triptych shows the site before the former chalk factory buildings were raised; after they were raised but before the site was remediated; and after the first phase of construction.
A closer view of the site before remediation.
An early photo of Phoenix Park
The park features an excellent view of the Philadelphia skyline. Phoenix Park and the nearby fishing pier are the only places in Waterfront South where pedestrians can access the waterfront.
Phoenix Park in summer. The wildflower meadows act as a rain garden.
The following slides can be used to introduce students to the two types of assignments they can complete for this module: a short webpage and/or a full project proposal.
Assignments

**Group Project Proposal:** Each group will write a *Project Proposal* in an effort to convince your “customer,” the CCMUA, that they should hire you to complete the job.

**Group Report Web Page:** As a group, you must become specialists in one aspect of the project and collaboratively prepare a webpage that briefs your audience on the ins and outs of the specific aspect you’ve researched.

Brief introduction to the Assignments, geared toward students.
GROUP RESEARCH

Each group will be assigned to become an expert in one of the follow aspects of Phoenix Park and the Waterfront South community:

1. Community Stakeholders: Historical Perspective
2. Community Stakeholders: Future Plans Perspective
3. Camden County MUA: Political, Social, & Cultural Factors
4. Camden County MUA: Engineering & Planning
5. Delaware River Ecosystem

Through research, your group will become intimately familiar with one part of the project. To begin, visit our Resource Bank, which contains essential information you’ll need, including invaluable interviews with community members.

This slide introduces the different aspects of the project. It’s designed so that students can be split into groups. If there are only 4 groups, the CCMUA groups (3 and 4) can be combined into one.
Group Report Webpage

As a group, you must become specialists in one aspect of the project and collaboratively prepare a webpage that briefs your audience on the ins and outs of the specific aspect you’ve researched.

Brief introduction to the Webpage portion of the assignment
Visual representation of the Resource Bank so that students can be sure they’ve found the right document. You could also show the PDF on screen.
Although the park is technically finished in terms of construction, Phoenix Park still has a lot of room for future development. Future additions to the park could add different features from park benches and tables, to the planting of more trees and flowers. The park in its current state has left a lot of room to expand and develop what is currently there.
This slide introduces the Project Proposal assignment, which requires more time. It introduces the Project Proposal as a professional document.
Every project will have constraints or parameters—these ones are not too onerous but give students some guidance.
Project Proposal

Objectives

1. Identify what work is to be done
2. Explain why this work needs to be done
3. Persuade the reader that the proposer (i.e. you) are qualified for the work, have a plausible management plan and technical approach, and have the resources needed to complete the task within the stated time and cost constraints.
In-class Activity

What follows is one in-class activity that can be used for either the one week or the three week versions of the assignment. It should take 30-45 minutes of class time.
LET’S GET STARTED

Each group will be assigned to become an expert in one of the follow aspects of Phoenix Park and the Waterfront South community:

1. Community Stakeholders: Historical Perspective
2. Community Stakeholders: Future Plans Perspective
3. Camden County MUA: Political, Social, & Cultural Factors
4. Camden County MUA: Engineering & Planning
5. Delaware River Ecosystem

With your group, begin to research each aspect of the project and make a preliminary list of preference: which aspect do you want to cover?

This activity can be done either in the class before the main activity that follows or as part of it. In this case, I have each group of students conduct preliminary research about each aspect of the project and then rank the topics in their order of preference. I then assign each group one aspect based on their preferences, trying to give each group either their first or second choice. Students should start with the Resource Bank.

Once students decide which topic they will be covering, you can proceed to the next slides, which give students questions to answer that guide their initial research.
Each group is assigned two questions to research and find answers to. All of the information is readily available either on the Resource Bank or through simple Google searching.

Students can find information for Question 1 in the interview with Donna Helms, especially...
COMMUNITY STAKEHOLDERS: FUTURE PLANS PERSPECTIVE

**Group:** find answers to these two questions, and be prepared to report back

1. Can you find two exciting examples of existing waterfront parks in urban areas?
2. Can you find one or two cool ideas visitors to Phoenix Park have about how the park could be improved?

Students should look in the “intercept surveys” for responses to Question 2.
CAMDEN COUNTY MUA

**Group:** find answers to these two questions, and be prepared to report back

1. What does combined sewer overflow mean? How does it create problems for the CCMUA?
DELAWARE RIVER ECOSYSTEM

**Group:** find answers to these two questions, and be prepared to report back

1. Why is the Delaware River so economically and environmentally significant? Give us some eye-popping facts.
2. How is the Delaware River both a source of drinking water and the place where cities like Camden and Philadelphia release their (treated) wastewater and sewage?
Group work

- You have 15 minutes to conduct this research
  - I will check in with you regularly and provide guidance.
- When your 15 minutes are up, you will have 5 minutes to share your findings
  - Take notes, and pick one person from your group to report back
The following slides are relevant to the Student Web page assignment.
GROUP Report Webpage

Using Google Sites, you will, with your lab groups, prepare a public-facing webpage about the individual aspect of the topic you’ve been assigned to become an expert in. Your webpage should succinctly and compellingly summarize and educate its readers. You’ve done a lot of research--now take the opportunity to share it with others.

You will also give a brief (10 minute), informal presentation that introduces the rest of us to your research and guides us through what you’ve found.

This information is taken from the Assignment Sheet
GROUP Report Webpage

Your main job is to **educate** the rest of the class, and any other visitors to your site, about your specific aspect of the project.

This slide reminds students of the purpose of the assignment.
Writing for the web

• Research shows that most people **scan**, rather than carefully read.

• So it’s important to craft “**scannable**” pages
  
  • highlighted **keywords**
  • meaningful **sub-headings** (rather than "clever" ones)
  • **bulleted lists**
  • **one** idea per paragraph
  • **lean text** (short paragraphs, short sentences, short words)

This slide and the next four slides share simple findings and tips about how writing for the web is different from academic writing.
Writing for the web

- Eye-tracking studies have shown that readers move through webpages in a “F” pattern
- The most important information needs to go at the top
- Keep content short and to the point
- Break up text into small chunks and short paragraphs
- Use bold and italics sparingly
Citations and hyperlinks

- Few webpages have a list of References at the bottom
- Instead, provide **hyperlinks** to sources and additional information
  - Link text that describes what people will find when they click the link
  - Avoid using “click here”
  - Do not paste URLs into your text
Images and design

- Adding images makes your page more visually appealing
- But the images must not overwhelm the content
- When it comes to design, **readability** is paramount. Do not distract readers from your content.
Webpage: In-Class assignment

By the end of class today, I want you to add the following information to your group’s page:

1. An initial list of **3 crucial pieces of information** about your aspect of the project
   - What do other groups absolutely need to know?
2. At least **3 essential resources** relating to your aspect of the project
   - What resources will other groups need to have handy?

Here is one example of a in-class activity that encourages students to begin working on their webpage in class in their groups.
The slides that follow provide students with more information and guidance about the Project Proposal assignment. The information is similar to the Assignment Sheet, but formatted better for in-class viewing.
PROJECT Proposal

- Each group will write a Project Proposal in an effort to convince your “customer,” the CCMUA, that they should hire you to complete the job.
- You have a lot of freedom when it comes to choosing how you would like to improve the park, but you have two constraints:
  - Your proposal must balance the needs of three stakeholders:
    - the Waterfront South community
    - the CCMUA
    - the Delaware River ecosystem
  - Your proposal must include an element designed to educate park visitors about the in-progress Living Shoreline
Format & Organization

1. Title Page
2. Executive Summary (one page)
Format & Organization

Statement of Problem (the “Why?”)
- In short, explain why Phoenix Park needs to be improved, providing relevant background information and context
Format & Organization

Objectives (the “What?”)

- Here you translate the needs of the stakeholders into specific designs that meet these needs. Define the scope of work and clearly state the project objectives, including design specifications in specific, quantitative terms. Also address any critical design issues, constraints, and/or limitations.
Format & Organization

Technical Approach (the “How?”)
- Even though you may not have a comprehensive solution to all of the design problems, in this section you should present an initial design focused on how you will attack the problem, with some design concepts
Format & Organization

Schedule & Plan of Action: (the “How and When?”)
• Describes how the project could be managed, including a timetable with milestones. Specific items to possibly include in this section are as follows:
  • Description of task phases
  • Timeline with milestones
Format & Organization

Budget (the “How Much”)

• Provide your best estimate of how project funds will be spent. For this project, you have a budget of $30,000 of funding from the CCMUA, and you are encouraged to brainstorm additional sources of funding, as well.