Building on the UW-Green Bay Master Plan: Promoting Sustainability

A Project by Graduate Students in the Capstone Seminar Course
Environmental Science and Policy Graduate Program, Fall 2005

Welcome to the Seminar in Environmental Science and Policy Poster Presentation.

The Seminar in Environmental Science and Policy is a capstone course for the Environmental Science and Policy graduate program. Each year a project is selected that allows all second year students to work together to integrate science and policy on a topic of local concern.

This year, we selected the campus sustainability and master plan project after Dr. Dean Rodeheaver, Assistant Chancellor for Planning and Budget, presented the campus master plan to our class and posed various questions about sustainability on campus. We thought this would be a great project for us to undertake since it would permit us to utilize our diverse backgrounds and experiences, as well as address issues of environmental sustainability at a time when the university is planning for growth.

Source: UW-Green Bay Draft Master Plan, 2005

The figure above shows new roads, parking lots, academic buildings and residential buildings. As the campus grows and thousands more people live, work and use the University there will be a greater demand for energy and transportation; more impervious surfaces and solid waste; and a greater potential for negative impacts on the natural communities within the Cofrin Arboretum. With this plan for growth, there is a great opportunity for UW-Green Bay to develop in a more environmentally sustainable way. UW-Green Bay should be a regional leader in the testing and adoption of more sustainable energy, transportation, stormwater, waste, and natural areas management.

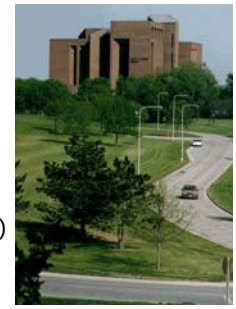
In order to address the issues that we believe are most central to the campus, the Capstone Seminar students divided into five work groups:

- Energy
- Transportation
- Stormwater Management
- Cofrin Arboretum
- Administrative Organization

Each work group will be reporting on their research and providing recommendations during an oral presentation at **7pm in MAC Hall 206**. An outline of each group's presentation and the order in which they will present is shown to the right.

Written reports from each work group will be posted on the Environmental Science and Policy Graduate Program website.

Energy



- Advantages of wind power
  - Energy savings
  - Educational opportunities
  - Environmental benefits
- Benefit-cost analyses of two turbines, a 1.5 megawatt (MW) and a 100 kilowatt (kW).
- Funding possibilities
- Energy bill before the Wisconsin State Legislature: Campus Opportunities
- Energy alternatives such as geothermal
- Energy education

Transportation

- Transportation Demand Management (TDM)
- Challenges to sustainable transportation at UW-Green Bay
- GIS analysis and survey findings
- TDM strategies for UW-Green Bay

Stormwater Management

- Pertinent federal and state regulations
- Current and proposed stormwater management on campus
- Recommendations for more sustainable stormwater management practices
  - rain gardens/bioretention cells
  - treatment trains/stormwater parks
  - pervious pavements

The Cofrin Memorial Arboretum

- Description of the Cofrin Memorial Arboretum
- Uses of the Arboretum
- Species within the arboretum
- Natural areas within the arboretum
- The Mahon Woods management unit study
- Major threats to the arboretum
- Suggested strategies to protect and preserve the arboretum

Administrative Organization

- Options for organization at UW-Green Bay based on:
  - Interviews with campus officials
  - Examination of practices at other universities
- Recommendation to establish a sustainability committee

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