

## **URPL 590 - Contemporary Topics in Urban and Regional Planning: Planning Support Systems**

Spring 2009 – 1 credit  
5 weeks – (January 20 to February 19)

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Tuesday, 2:30 to 3:45 pm  
Thursday, 2:30 to 4:15 pm

Lecture: Old Music Hall, Room 208  
Lab: URPL Computer Lab, Old Music Hall, Room 109  
Web Conferences: Pyle Center, Room 327

Course Website: <http://maps.aqua.wisc.edu/urpl590-spring09/pss/index.htm>

### **Course Summary**

Planning Support Systems (PSS) are a subset of Spatial Decision Support Systems that are designed to analyze and compare the impacts of alternative land use scenarios. PSS software is growing in sophistication. Research by Professor Aslıgül Göçmen indicates that while the use of GIS in Wisconsin planning agencies is extensive, there is little use of PSS at the local government level. This course will utilize prominent PSS software and Wisconsin GIS data to analyze alternative land use scenarios. Students will explore the evolution of planning support systems and the application of INDEX and CommunityViz software.

### **Prerequisites**

This is an intermediate-level GIS course. An introductory course in GIS or cartography is recommended.

### **Course Goals**

- Explore the theory and evolution of planning support systems
- Understand how specific planning support system software can be applied
- Effectively communicate the societal benefits of planning support systems
- Complete a project that compares and contrasts the functionality of two planning support system software
- Learn to work effectively in a group setting
- Sharpen writing skills directed at an audience of professional planners

**Textbook**

Brail, Richard K. (Ed.). 2008. Planning Support Systems for Cities and Regions. Cambridge, MA: Lincoln Institute of Land Policy.

**Other Readings**

Berke, Philip R., David R. Godschalk, Edward J. Kaiser, with Daniel A. Rodriguez. 2006. Urban Land Use Planning, 5<sup>th</sup> Edition. University of Illinois Press. Chapter 4.

Geertman, Stan and John Stillwell (Eds). 2003. Planning Support Systems in Practice. Berlin: Springer-Verlag.

Brail, Richard K. and Richard E. Klosterman (Eds.). 2001. Planning Support Systems: Integrating Geographic Information Systems, Models, and Visualization Tools. Redlands, CA: ESRI Press.

**Web Resources**

Place Matters

<http://www.smartgrowthtools.org/>

Ecosystem Based Management Tools

<http://www.ebmtools.org/>

Urban Insight

<http://www.urbaninsight.com/>

**Project**

Students will divide into two groups and utilize either INDEX or CommunityViz PSS software to analyze alternative development scenarios for the Historic Fifth Ward in Milwaukee. The analyses will be communicated through both a report and presentation. When complete, both the reports and presentations will be posted on the course web site.

**Grading**

Group Project – PSS Report (70%)

Group Project – PSS Presentation (30%)

## Schedule

### Week 1

|  |   |
|--|---|
| Tuesday, January 20 <sup>th</sup><br>LECTURE         | Course Outline, Introductions, Overview of Planning Support Systems, Data Requirements/Availability<br>Reading: Brail (2008), Foreword, Introduction, Chapters 1 and 11                             |
| Thursday, January 22 <sup>nd</sup><br>WEB CONFERENCE | Group Project Case Study – Milwaukee's Historic Fifth Ward and the Near South Side Area Plan (Mike Maierle, Milwaukee Department of City Development)<br>Reading: Near South Side Area Plan website |

### Week 2

|  |  |
|--|--|
| Tuesday, January 27 <sup>th</sup><br>WEB CONFERENCE  | An overview of the CommunityViz software (Doug Walker, President, Placeways, LLC)<br>Reading: Brail (2008), Chapter 8          |
| Thursday, January 29 <sup>th</sup><br>WEB CONFERENCE | An overview of the INDEX software (Thom York, Criterion, Inc.), Formation of Project Teams<br>Reading: Brail (2008), Chapter 7 |

### Week 3

|   |                   |
|---|-------------------|
| Tuesday, February 3 <sup>rd</sup><br>LAB  | Project Work Time |
| Thursday, February 5 <sup>th</sup><br>LAB | Project Work Time |

### Week 4

|  |                   |
|--|-------------------|
| Tuesday, February 10 <sup>th</sup><br>LAB  | Project Work Time |
| Thursday, February 12 <sup>th</sup><br>LAB | Project Work Time |

### Week 5

|   |                                       |
|---|---------------------------------------|
| Tuesday, February 17 <sup>th</sup><br>LAB             | Project Work Time                     |
| Thursday, February 19 <sup>th</sup><br>WEB CONFERENCE | Project Presentations, PSS Report Due |

Revised – January 20, 2009