

Course : Advanced Geographical Information System

Subtitle : Urban and Land Information System

Course number : 457.541(002)

Credit : 3

Lecturer : Kiyun Yu (building 35, room 406, tel 880-1355 kiyun@snu.ac.kr)

1. Synopsis of Course

In this course, we try to figure out appropriate engineering solutions to various urban and land use problems based on fundamental theory of GIS. For this, reviews of computer perspective GIS will be done followed by comprehensive analysis of many facets of applications on urban and land use including plannings and managements. Parts of course will be filled with thematic lectures and rests are filled with students' presentations.

2. Textbooks & References

Textbook : Multimedia Information Systems for Urban Planning, Taylor&Francis

(by Robert Laurini)

-> <http://liris.cnrs.fr/robert.laurini/isup/>

Reference : to be posted later

3. Lecture Schedule

Entire lectures are divided into four sessions:

from session 1 to 3 : lectures using textbook

session 4 : students' presentations

- 1/4 session : system analysis in urban planning, design methodology of information systems, acquisition of urban data, control of data quality, multi-resource updating of databases
- 2/4 session : hyper-maps and websites, from urban knowledge to spatial meta-information, visualization, access to urban databases, groupware in urban planning
- 3/4 session : computer systems for public participation, computer architectures for urban planning, real-time information systems for urban environment and risks monitoring

- 4/4 session : thematic study and presentations

* we are very positive to attend seminars/workshops/conferences during course if they are helpful to deepening our understanding on course topics

4. Remarks

- pre requisite : introduction to spatial information engineering, spatial information systems, remote sensing

- for lecture notes and other data sources, visit ETL site

5. Evaluation and Grade

study presentations (100%)