Information Engineering of Regional Environment

2 units (selection)

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Target⟩ The information of regional environment, technique of analysis and information management are explained. The method and technique using for application of environmental information to development of regional policies are lectured.

Outline⟩ The information of regional environment, technique of analysis, information management and geographic information system are explained using the various kinds of materials and examples in practical planning.

Style⟩ Lecture and excercise

Keyword⟩ *information of regional environment, technique of analysis*

Relational Lecture⟩ "**Urban and Regional Planning**"(0.8), "**Advanced Environmental Systems Engineering**"(0.2)

Requirement⟩ 特になし

Notice⟩ Please download files for this lecture from u-learning system, print out and take to the lecture room. The materials are not distributed in the lecture.

Goal⟩ To obtain the knowledge of the information of regional environment, technique in survey, information management and computer aid systems, and apply them to design of regional plan and political simulation.

Schedule⟩
1. Bayes' theorem
2. discrete choice analysis
3. expert system
4. fuzzy reasoning
5. neural network
6. genetic algorithm
7. decision tree
8. analytic hierarchy process
9. fuzzy integration
10. game theory
11. evolution game theory
12. reinforcement learning
13. complex system
14. presentation of results of exercise : part 1
15. presentation of results of exercise : part 2

Evaluation Criteria⟩ Evaluation of calculation exercises and final presentation count 100%.

Textbook⟩ To be introduced in the class.

Reference⟩ To be introduced in the class.

Webpage⟩ http://uls01.ulc.tokushima-u.ac.jp/

Contents⟩ http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216753

Student⟩ Able to be taken by only specified class(es)

Contact⟩
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Note⟩ 特になし.