國土規劃

鄒克萬
Course Information

- Instructor contact information:
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- Scheduled meeting time: Monday, 9:10 - 12:00 noon

- Office location and hours:
  50314, Wednesday and Friday: 11:00 a.m. – 12:00 noon
Course objectives

- This course is designed as an advanced learning and research of regional and Nationwide Land Planning.

- The course will discuss Taiwan and international planning experience at the nationwide, region and county levels.

- We will also study multi-level nationwide land planning theories and strategies in land, economic development, transportation, natural resource protection, growth management systems, governance and social justice etc.

- The course will use a diverse set of readings, online resources, discussions, presentations, guest speakers, and two case studies.
Course objectives

There are six components (land developing issue, nationwide (regional) planning theory, analytical techniques, alternative generation, governance and policy impact) provide the basis for key course objectives.

At the end of this course, students will better understand the theoretical basis and professional practice of Nationwide Land Planning, be able to apply regional analytical tools and develop theories.
Course requirements

- In addition to student participation during lectures (20 %), there are two primary requirements of this course that, when combined, will determine student grades:
  
- 1. midterm examinations (20 %):
  
- 2. research note (the form of a “research note” of no more than 2000 words and must be tied to some theoretical foundation of regional science) and work assignments (60 %).
Learning materials 學習資源

- We will be using a variety of media to assist with student understanding of course topics.

- Wherever possible, we will be accessing material readily available on the web.

- Three primary learning materials will be used in this class. ⋯ they include:
Learning materials 學習資源

- **The Web Book of Regional Science (free)**
  www.rri.wvu.edu/regscweb.htm

- **The Journal of Regional Analysis and Policy (free)**
  www.jrap-journal.org
Learning materials 學習資源

- 國土規劃全球資訊網
  
  `tpweb.cpami.gov.tw`

- NCKU E-JOURNAL
Case of work Study

- Nationwide Land Planning of Flooding Hazard (One of NCKU Top Research Projects)
- Land Development Analysis and Issue.
- Safety Research of Land Development.
- Creative Nationwide Land Planning.
Case of Work Study

Comprehensive Planning:

- A comprehensive overview of the process, methods and techniques involved in preparation of local government plans for the physical and social development of regions.
- Emphasis is on the tools, techniques, and methods involved in preparing land use plans, including land suitability analysis and public participation.
- Topics includes economic development, transportation, infrastructure and housing plans, plan implementation, and intergovernmental coordination, as well as plans for protection of open-space, environmental, agricultural and historic resources etc..
Organization of Course

1. A conceptual basis for analyzing and nationwide land planning problems
   - sustainable regional development
   - growth theory
   - social and spatial disparity (inter and intra regional)
   - economic and land restructuring
Organization of Course

2. Regional science techniques and applications
   — Descriptive approaches of nationwide land development problem analysis.
   — Inferential approaches of nationwide land development problem analysis.
   — Spatial approaches of nationwide land development problem analysis.
   — Plans and policies making process.
   — Nationwide land planning information systems
Organization of Course

3. Approach of developing phenomena, planning factors and public policy

- Traditional planning factors of production (land, labor, and capital)
- Contemporary additional factors of production (environment, technology, amenities, public infrastructure and governance)
Organization of Course

4. Linking regional analysis to policy and planning
Course Outline

Week 1

- Overview of course, schedule and expectations.
Course Outline

Week 2

- Introduction to nationwide land development issues
- Nationwide data, policy analysis, politics and decision-making
- A circular flow framework for understanding nationwide land development linkages
- Historical perspective of regional science and the battle for the world economic development
Course Outline

Week 3

- Growth versus development
- Distributional aspects of growth (convergence and divergence?)
- Equity, efficiency, and market failures/externalities
- Development theory
Course Outline

Week 4

- Location theory and nationwide land problem analysis
- Regional competitive advantage and the Porter approach
Course Outline

Week 5

- Nationwide land planning information systems
- Descriptive tools of planning analysis
  - Gravity models of location
  - Export base multipliers and regional analysis
  - Location quotient, minimum requirements, and applications
  - Shift-share analysis
Course Outline

Week 6

- Inferential tools of planning analysis
  - Review of the predictive model,
  - Region-level input-output analysis
  - Alternative regional modeling tools
  - Econometric models
Course Outline

Week 7

- Spatial tools of planning analysis
  - Remote Sensing
  - GIS
  - Spatial statistics and models
Course Outline

Week 8

- Economic and industrial diversity versus specialization
- Consequences of agglomeration and cluster
- Regional disparities: convergence versus divergence, lagging regions and restructuring
- Labor market issues
Course Outline

Week 9

- Land markets (supply and demand characteristics of land; land rent)

- Land value and urban form
Course Outline

Week 10

- Urban and rural sprawl
- Analysis of land use change: theoretical and modeling approaches
- Spatial array of land uses and urban form
Course Outline

Week 11

- Multi aspects of land use planning
- Land-based resources planning
- Land development suitability
Course Outline

Week 12

— Environmental amenities and development

— Population and migration analysis
Course Outline

Week 13

- Nationwide physical infrastructure and services (transportation... )
Course Outline

Week 14

- Nationwide non-physical infrastructure and services (social, education...)

Course Outline

Week 15

- Capital markets (financial capital versus public capital) and migration of capital

- Technology and regional innovation
Course Outline

Week 16

- Administrative systems for nationwide land and its issues.
- Future construction strategies of the administrative systems for governance.
Course Outline

Week 17

- Communication in new information era.

- Nationwide land planning: Linking theory, research and professional practice

- Discussion