# 區域經濟發展評估 Evaluation of Regional Economic Impacts

Semester Spring semester 2016

Time Monday 6, 7, 8

Classroom 62X01

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Office hour 2~4PM Wednesday or by appointment, room 62410

### Introduction

This course is designed to offer in-depth information regarding the evaluation methods of regional economic impacts. The course introduces major evaluation methods of regional economic impacts (especially in recreation and tourism), beginning with Input-Output Analysis, Social Accounting Matrix, Tourism Satellite Accounts, and Environmentally Extended Input-Output Model. Cases studies of international and domestic tourism projects are used. Students will be exposed to the fundamental theories on each method as well as hands-on experiences on the applications of tourism & transportation cases.

### <u>Purposes</u>

- 1. To improve students' knowledge on evaluation methods of regional economic impacts.
- 2. To develop the calculation ability with soft-ware operation. Need to have a notebook.

#### **Textbooks**

Hara, T. (2008). Quantitative Tourism Industry Analysis: Introduction to Input-Output, Social
Accounting Matrix Modelling and Tourism Satellite Accounts. Oxford, UK: Butterworth-Heinemann.
電子書 http://www.sciencedirect.com/science/book/9780750684996

### Grading

Homework20%Mid-term exam25%Final exam25%Term-project30%

### **Contents**

#### 1. Input-Output (I-O) Analysis

- Direct, indirect and induced effects
- Economic base multipliers
- Input-Output table, coefficients and inverse matrix computation
- Construction of regional Input-Output table
- Economic analysis using I-O
- Excel-based model

Textbook: (Hara, 2008) Chapter 1-3

Assigned reading:

- a. Crompton, J. L., Lee, S., & Shuster, T. J. (2001). A guide for undertaking economic impact studies: The Springfest example. *Journal of Travel Research*, 40(1), 79-87.
- b. 孫雅彥 (2010), 2009 世運會經濟效應評估, 高雄市: 高雄市政府研究發展考核 委員會。

#### 2. Social Accounting Matrix (SAM)

- Conceptual framework of SAM
- Structure of SAM table
- Economic analysis using SAM

Textbook: (Hara, 2008) Chapter 4

### 3. Tourism Satellite Account (TSA)

- Conceptual framework of TSA
- Construction of TSA
- Case studies of TSA

Textbook: (Hara, 2008) Chapter 5

Assigned reading:

a. Taiwan Tourism Bureau (2010). *Taiwan Tourism Satellite Accounts*. Taipei, Taiwan: Taiwan Tourism Bureau, Ministry of Transportation and Communication.

### 4. Environmentally extended input-output model

- Basic concepts of environmental extended input-output analysis
- Applications of EEIO in tourism carbon footprint estimation.

#### Assigned reading:

a. Sun, Y. Y. (2014). A framework to account for the tourism carbon footprint at island destinations. Tourism Management, 45, 16-27.

## Arrangement of courses in this semester

| Week | Contents  |
|------|---|
| 1    | Introduction  |
| 2    | 228 連假補假不上課   |
| 3    | Chapter 1 - Introduction to Tourism as an Industry                    |
| 4    | Chapter 2 - Introduction to Quantitative Methods for Tourism Industry |
| 5    | Chapter 3 - Input-Output Model and its Application                    |
| 6    | Chapter 3 - Input-Output Model and its Application                    |
| 7    | 春假不上課   |
| 8    | Software operation  |
| 9    | Mid-term exam   |
| 10   | Chapter 4 - Social Accounting Matrix Model and its Application        |
| 11   | Chapter 4 - Social Accounting Matrix Model and its Application        |
| 12   | Chapter 5 - Introduction to Tourism Satellite Accounts                |
| 13   | Chapter 6 - Future Directions and Explorations                        |
| 14   | Environmentally Extended Input-Output Model                           |
| 15   | Environmentally Extended Input-Output Model                           |
| 16   | Software operation  |
| 17   | Term paper presentation   |
| 18   | Final exam  |

### **Rules:**

- You need to have a notebook computer for the class exercise.
- No late homework will be accepted. All assignments are due at the beginning of class.
- No make-up exams will be granted unless with legitimate reasons.
- Be on-time for your classes and please turn-off your cell phone. It is a curtsey for your classmates and the teacher.
- 報告及作業請用再生紙列印,或雙面列印。節省紙張,保護地球!
- 請用釘書針裝訂及可,不需使用特殊裝訂或塑膠套子。