



Academic year	2014-15
Subject	10165 - Modelling the Impact of Tourism on the Economy
Group	Group 1, 2S
Teaching guide	A
Language	English

## Subject identification

<b>Subject</b>	10165 - Modelling the Impact of Tourism on the Economy
<b>Credits</b>	1.2 de presencials (30 hours) 2.8 de no presencials (70 hours) 4 de totals (100 hours).
<b>Group</b>	Group 1, 2S (Campus Extens)
<b>Teaching period</b>	2nd semester
<b>Teaching language</b>	English

## Professors

Lecturers	Horari d'atenció alumnes					
	Starting time	Finishing time	Day	Start date	Finish date	Office
Elisabeth Valle Valle <a href="mailto:elisabeth.valle@uib.es">elisabeth.valle@uib.es</a>	11:00h	12:00h	Wednesday	01/09/2014	31/08/2015	DB258 (Cita previa por email)
Francisco Sastre Albertí <a href="mailto:fsastre@uib.es">fsastre@uib.es</a>	11:00h	12:00h	Thursday	01/10/2014	30/09/2015	DB215

## Contextualisation

<PARAGRAF><PARAGRAF><PARAGRAF>The importance of tourism to economies is now well recognised. As a result, when tourism changes or policy shifts are being considered, there is an interest in determining what impact on the economy they might have. Techniques such as input-output analysis and social accounting matrix analysis are very commonly used to make estimates of the economic impact of changes in tourism expenditure. Tourism Satellite Accounts (TSAs) measures the contribution of tourism to the economy. Computable General Equilibrium (CGE) models go much further than the previous models and are now extensively used to estimate economics impacts of a wide variety of changes and policies.</PARAGRAF></PARAGRAF></PARAGRAF>

## Requirements

There is no requirements

## Skills

### Specific

- \* N.21: To learn how to plan economic theory models using tools that interpret the reality.
- \* N.26: To apply appropriate scientific methodologies knowing its basis.
- \* N.33: To contribute to the economic and tourism knowledge areas.





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### Generic

- \* N. 8: To convert an empirical problem in a research object and to formulate conclusions.
- \* N.18: To make decisions, to solve problems and to develop new ideas.
- \* N.19: To critically interpret and evaluate results.

### Basic

- \* You may consult the basic competencies students will have to achieve by the end of the Master's degree at the following address: [http://estudis.uib.cat/master/comp\\_basiques/](http://estudis.uib.cat/master/comp_basiques/)

## Content

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### Theme content

#### I. Introduction

##### 1. Lessons

- The growing role of tourism in the economy
- The economic impact of tourism

#### II. System of European National Accounts and Regional Accounts

##### 2. Lessons

- Introduction to the System of National accounts
- Main aggregates
- Units of production and institutional units
- Production activities
- Distribution operations
- Basic identities

#### III. The Input-output framework

##### 3. Lessons

- Concepts and structure of an I-O table
- Technical coefficients
- Determination of equilibrium quantities
- GAMS exercise

#### IV. Tourism Satellite Accounts (TSA)

##### 4. Lessons

- Brief history of TSA
- Key concepts
- General compositions TSA
- TSA case studies

#### V. Social account matrix (SAM) and SAM models

##### 5. Lessons

- Social accounting matrices
- Accounting multipliers
- Tourism multipliers
- A comparison of input-output and SAM models
- GAMS exercise





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## VI. An introduction to applied general equilibrium models

### 6. Lessons

- What's an AGE model?
- Design of an AGE model
- Numerical specification
- Policy simulations
- GAMS exercises

## Teaching methodology

### In-class work activities

Modality	Name	Typ. Grp.	Description	Hours
Theory classes	Theory	Large group (G)	Introduction. System of European National Accounts and Regional Accounts. The Input-output framework. Tourism Satellite Accounts. Social account matrix (SAM) and SAM models. An introduction to applied general equilibrium models.	10
Practical classes	Software	Large group (G)	GAMS	14
ECTS tutorials	Doubts	Small group (P)	To solve theoretical and practical doubts	6

At the beginning of the semester a schedule of the subject will be made available to students through the UIBdigital platform. The schedule shall at least include the dates when the continuing assessment tests will be conducted and the hand-in dates for the assignments. In addition, the lecturer shall inform students as to whether the subject work plan will be carried out through the schedule or through another way included in the Campus Extens platform.

### Distance education work activities

Modality	Name	Description	Hours
Individual self-study	Economic report	Report	8
Individual self-study	Functions	Maximization and minimization	6
Individual self-study	Main aggregates	Manipulation of a symmetric table to obtain the main aggregates	10
Individual self-study	Simple general equilibrium model	Introduce unemployment	16
Individual self-study	Simulation	Demand simulation and rasmussen's indexes	10
Individual self-study	Tourism Satellite Accounts	Report	10
Group self-study	Studying	Study	10





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## Specific risks and protective measures

The learning activities of this course do not entail specific health or safety risks for the students and therefore no special protective measures are needed.

## Student learning assessment

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### Economic report

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Report
Assessment criteria	You have to elaborate an economic report

Final grade percentage: 15%

### Functions

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Maximization and minimization
Assessment criteria	You have to maximize utility and minimize cost

Final grade percentage: 10%

### Main aggregates

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Manipulation of a symmetric table to obtain the main aggregates
Assessment criteria	You have to obtain value added, production, intermediate demand. You have to obtain an inverse matrix in GAMS

Final grade percentage: 15%

### Simple general equilibrium model

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Introduce unemployment
Assessment criteria	You have to introduce unemployment in a simple general equilibrium model

Final grade percentage: 15%





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### Simulation

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Demand simulation and rasmussen's indexes
Assessment criteria	You have to study what would be the consequences of a specific impact on the economy. You have to obtain Rasmussen indexes

Final grade percentage: 15%

### Tourism Satellite Accounts

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Modality	Individual self-study
Technique	Student internship dissertation ( <b>non-retrievable</b> )
Description	Report
Assessment criteria	You have to elaborate a report on a specific Tourism Satellite Accounts.

Final grade percentage: 30%

## Resources, bibliography and additional documentation

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### Basic bibliography

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Hara, Tadayuki Quantitative tourism industry analysis :introduction to input-output, social accounting matrix modeling and tourism satellite accounts /Tadayuki Hara. Amsterdam :Butterworth-Heinemann,2008.

### Other resources

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Dwyer, L., P. Forsyth and R. Spurr, 2004, 'Evaluating tourism's economic effects: new and old approaches', *Tourism Management*, 25, 307-317

Polo, C., Valle, E. 2008, 'A general equilibrium assessment of the impact of a fall in tourism under alternative closure rules: the case of the Balearic Islands', *International Regional Science Review*. 31(1), 3-34.

Wagner, J. E., 1997, 'Estimating the economic impacts of tourism', *Annals of Tourism Research*, 24(3), 592-608.

Pyatt, G., 1988, 'A SAM approach to modelling', *Journal of Policy Modelling*, 10(3), 327-352.

Polo, C., Valle, E. 2008, 'An assessment of the impact of tourism in the Balearic Islands', *Tourism Economics*. 14(3), 615-630.

