

## Syllabus

### Subject

<b>Subject / Group</b>	11493 - Analysis and Interpretation of Results / 1
<b>Degree</b>	Master's Degree in Economics of Tourism: Monitoring and Evaluation
<b>Credits</b>	3
<b>Period</b>	First semester
<b>Language of instruction</b>	English

### Professors

Lecturers	Office hours for students					
	Starting time	Finishing time	Day	Start date	End date	Office / Building
Audrone Virbickaite - <a href="mailto:audrone.virbickaite@uib.es">audrone.virbickaite@uib.es</a>	10:00	12:00	Wednesday	06/06/2018	05/06/2019	Imprescindible cita previa por email; DB210

### Context

The "Analysis and Interpretation of Results" course is compulsory for those students who want to graduate in the Master in Economics of Tourism with specialization in Monitoring. The course is offered as an elective for those students who choose to graduate in the Master in Economics of Tourism with specialization in Evaluation or for those who choose to graduate in the Master in Economics of Tourism with no specialization. The course is integrated into the "Monitoring Techniques applied to Tourism" module. It is closely related to the other quantitative courses in the Monitoring module, which focus on different stages of Monitoring, with "Analysis and Interpretation of Results" representing an intermediate stage between obtaining data for the available indicators and generating regression results to be used for prediction. "Analysis and Interpretation of Results" studies various measures of association and correlation and how to interpret them, whereas "Causal Analysis and Prediction" is concerned with causality relationships.

### Requirements

#### Essential

The essential requirements are covered by the criteria of admission to the Master's degree.

### Skills

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### Specific

- \* CE7 – To be able to collect, generate, process and analyse statistical data to support monitoring and evaluation activities .
- \* CE10 – To develop skills that facilitate integration into labour markets related to the tourism industry and, especially, to the companies and institutions that monitor and evaluate projects and programmes in the tourism environment .
- \* CE11 – To be able to structure the work undertaken, as well as the results obtained, with the purpose of presenting reports in the fields of monitoring and evaluation .

### Generic

- \* CG2 – To develop an innovative capacity by applying the acquired knowledge to the resolution of problems in new environments related to the tourism sector .
- \* CG7 – To acquire specialized knowledge about the tourism system in order to make it possible to face challenges and provide solutions .
- \* CG8 – To know how to apply information and communications technology (ICT) in the context of tourism projects .

### 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

The "Analysis and Interpretation of Results" course is part of the "Monitoring Techniques applied to Tourism" module and as such it will cover a range of quantitative techniques that will allow the study and following-up of the changes that take place in a tourism system during the period of implementation of a project, policy, program or plan. Naturally, the same techniques can be used under an evaluation perspective after the project, policy, program or plan has finished.

The purpose of the course is twofold. First, to learn how to apply those techniques to the comparison between the actual data gathered, and the aims and objectives set at the start. Second, to learn how to analyse and interpret the results of the economic evaluation of tourism projects.

### Range of topics

1. Introduction
  - \* Analysis and Interpretation of Results in the context of Monitoring and Evaluation
  - \* The importance of comparison in Monitoring and Evaluation
  - \* Applications to the case of Tourism
2. Statistical inference methods for comparison
  - \* Basic concepts: statistical inference and hypothesis testing
  - \* Hypothesis specification
  - \* Test statistics and decision criteria
  - \* Test quality: error types, power and p-value
  - \* Main parametric tests
  - \* Introduction to GRETL and exercises
3. Analysis of variance (ANOVA)
  - \* The ANOVA table
  - \* Testing with ANOVA: t-tests and F-tests

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- \* Using GRETL and exercises
- 4. Association measures and testing
  - \* The coefficients of correlation: simple correlation (Pearson's  $r$ ) and rank correlation (Spearman's  $\rho$ )
  - \* Testing association: t-tests and Chi-square tests
  - \* Using GRETL and exercises
- 5. Introduction to regression analysis
  - \* Basic concepts of regression analysis
  - \* Reading and interpreting regression output

## Teaching methodology

In-class work activities (0.72 credits, 18 hours)

Modality	Name	Typ. Grp.	Description	Hours
Theory classes		Large group (G)	Theory classes allow a detailed exposition of the most important aspects of each topic, especially the new concepts. They also allow a special focus on the most difficult issues, where students need more learning support. Finally, they also facilitate the understanding of the context in which each topic is placed, including the relationships between the different topics. Theory classes will take up a total of 10 hours per student. At the end of each theory topic, exercises of application and consolidation of the theory will be solved in class.	10
Practical classes		Large group (G)	Practical classes will take up a total of 6 hours per student. There will be two types of practical classes. On one hand, there will be 4 hours of computer-based classes to deepen the understanding of the theory and to allow the student to apply the theoretical concepts to practice datasets. The free econometric package GRETL will be used to this end. On the other hand, a 2-hour class will be dedicated to theoretical exercises.	6
Assessment		Large group (G)	A final exam will be given in the last class in order to assess the understanding of the whole course. The duration of the final exam will be 1.5 hours and it may include theory questions, exercises, questions regarding the interpretation of computer output, and one question asking for a brief abstract of the course project. The final exam is worth 50% of the final mark.	2

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 Aula Digital platform.

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### Distance education tasks (2.28 credits, 57 hours)

Modality	Name	Description	Hours
Individual self-study		Take-home exam will be worth 15% of the final grade. It will deal mostly with statistical inference questions. Students will have some exercises to solve at home individually and submit them by the indicated date. Students are expected to dedicate up to 2 hours in solving the exercises.	2
Group or individual self-study		Students should study the course materials and review their content in order to ensure that they have understood the basics of the subject. They should also carry out the tasks proposed to them, such as exercises, computer-based tasks, and the course project. Similarly, to deepen the understanding of the course contents and place them in context it is important to study the bibliography of the course. Students are expected to dedicate 55 hours to studying for the course and carrying out the course project. The written course project will be worth 35% of the final mark.	55

### 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

The final mark will consist of four parts:

- 1) The final exam is worth 50% of the final mark and recoverable if the student fails the course.
- 2) The take-home exam is worth 15% and is **not** recoverable if the student fails the course.
- 3) The written final course project worth 35% of the final mark and recoverable if the student fails the course.

Students pass the course if the final mark is at least 5 out of 10. Otherwise they fail and can attempt a second time the final exam and the written final course project. After that there will be no more attempts allowed until the student registers again for the course in the following academic year.

The justifications accepted by UIB for absence are the death of a first or second line direct relative of the student (for example, parents or grandparents), hospitalization of the student, or participation of the student in a court jury. If one of these situations is proven by a certified document, the student is exempt from the two conditions above on those dates and if assessment is affected the student is given an extraordinary assessment.

### Frau en elements d'avaluació

In accordance with article 33 of Academic regulations, "regardless of the disciplinary procedure that may be followed against the offending student, the demonstrably fraudulent performance of any of the evaluation elements included in the teaching guides of the subjects will lead, at the discretion of the teacher, a

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undervaluation in the qualification that may involve the qualification of "suspense 0" in the annual evaluation of the subject".

### Assessment

Modality	Assessment
Technique	Short-answer tests ( <b>retrievable</b> )
Description	A final exam will be given in the last class in order to assess the understanding of the whole course. The duration of the final exam will be 1.5 hours and it may include theory questions, exercises, questions regarding the interpretation of computer output, and one question asking for a brief abstract of the course project. The final exam is worth 50% of the final mark.
Assessment criteria	Set according to the competences described.

Final grade percentage: 50%

### Individual self-study

Modality	Individual self-study
Technique	Short-answer tests ( <b>non-retrievable</b> )
Description	Take-home exam will be worth 15% of the final grade. It will deal mostly with statistical inference questions. Students will have some exercises to solve at home individually and submit them by the indicated date. Students are expected to dedicate up to 2 hours in solving the exercises.
Assessment criteria	Set according to the competences described.

Final grade percentage: 15%

### Group or individual self-study

Modality	Group or individual self-study
Technique	Papers and projects ( <b>retrievable</b> )
Description	Students should study the course materials and review their content in order to ensure that they have understood the basics of the subject. They should also carry out the tasks proposed to them, such as exercises, computer-based tasks, and the course project. Similarly, to deepen the understanding of the course contents and place them in context it is important to study the bibliography of the course. Students are expected to dedicate 55 hours to studying for the course and carrying out the course project. The written course project will be worth 35% of the final mark.
Assessment criteria	Set according to the competences described.

Final grade percentage: 35%

## Resources, bibliography and additional documentation

### Basic bibliography

- \* Bryman, A. and Bell, E. (2007), "Business Research Methods", Oxford: Oxford University Press, 2nd edition.
- \* Hill, R. C., Griffiths, W.E. and Lim, G. C. (2012), "Principles of Econometrics", Wiley, 4th edition.
- \* Moore, D. and McCabe, G. (2003), "Introduction to the Practice of Statistics", New York: Freeman, 4th edition.

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- \* Newbold, P., Carlson, W. and Thorne, B.(2009), "Statistics for business and economics", Addison-Wesley / Prentice Hall, 7th edition.

### Complementary bibliography

- \* Ashenfelter, O., Levine, P. B. and Zimmerman, D. J. (2006), "Statistics and Econometrics: methods and applications", Wiley.
- \* Beltrán Pascual, M. (2004), "Statistical techniques and methods applied to the tourist sector", Direcció General d'Economia de Balears.
- \* Greene, W. H. (2007), "Econometric analysis", Addison-Wesley / Prentice Hall, 6th edition.
- \* O'Leary, Z. (2006), "Researching Real-World Problems: A Guide to Methods of Inquiry", SAGE Publications.
- \* Saunders, M., Lewis, P. and Thornhill, A. (2007), "Research Methods for Business Students", Harlow: Financial Times Prentice Hall, 4th edition.
- \* Stock, J.H. and Watson, M.M. (2012), "Introduction to Econometrics", Pearson.
- \* Wooldridge, J. M. (2006), "Introductory Econometrics: a modern approach", South-Western, 2nd edition.

### Other resources

- \* Charities Evaluation Services (2015), NCVO (The National Council for Voluntary Organisations), London, UK, available online at: <http://www.ces-vol.org.uk/about-performance-improvement/about-monitoring-evaluation/evaluation/conducting-evaluation/data-analysis-interpretation-evaluation>
- \* International Center for Alcohol Policies (1995), Washington, DC, US, available online at: <http://www.icap.org/PolicyTools/Toolkits/EvaluationToolkit/4DataAnalysisandInterpretation/tabid/446/Default.aspx>
- \* Wholey, J., Hatry, H. and Newcomer, K. (2010), "Handbook of Practical Program Evaluation" (especially Chapter 20), 3rd edition, San Francisco, CA: Jossey-Bass, free online downloadable book at: [http://www.themedfomscu.org/media/Handbook\\_of\\_Practical\\_Program\\_Evaluation.pdf](http://www.themedfomscu.org/media/Handbook_of_Practical_Program_Evaluation.pdf)

