



Faculty of Business Science and Tourism

GENERAL SPECIFICATIONS

ACADEMIC YEAR 2026-2027

DEGREE IN TOURISM

Subject Data

Name:

SEMINARIO DE MÉTODOS CUANTITATIVOS PARA LA ECONOMÍA Y LA EMPRESA

English name:

SEMINAR: QUANTITATIVE METHODS FOR ECONOMICS AND BUSINESS

Code:

858710304

Type:

Elective

Hours:

	Total	In class	Out class
Time distribution	75	22,5	52,5

ECTS:

Standard group	Small groups			
	Classroom	Lab	Practices	Computer classroom
2.4				0.6

Departments:

Economics

Knowledge areas:

Quantitative methods for economics and business

Year:

2nd/3rd

Semester

1st

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TEACHING STAFF

Name:	E-mail:	Telephone
Ramón Jiménez Toribio	toribio@uhu.es	959 217 871

Others Data (Tutoring, schedule...)

Group	Day and time	Dates
TI	Wednesday, from 12:30 to 14:30	Large (18 hours) and small (4.5 hours) groups dates and timetable available on the Moodle site for the course.

Prof.: Dr. Ramón Jiménez Toribio (coordinator)

Department: Economics

Office: 63 (Faculty of Business Science and Tourism)

Office hours: <http://goo.gl/dH7sB4>

First semester				
Monday	Tuesday	Wednesday	Thursday	Friday
		11:30-12:30		9:00-14:00
Second semester				
Monday	Tuesday	Wednesday	Thursday	Friday
			13:00-14:00	9:00-14:00

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SPECIFIC INFORMATION OF THE COURSE

I. Contents description:

I.1 In English:

Seminar of Quantitative Methods for Economics and Business applied to Tourism.

I.2 In Spanish:

Seminario de Métodos Cuantitativos para la Economía y la Empresa aplicados al Turismo.

2. Background:

2.1 Situation within the Degree:

Elective subject of "Public Management of Tourism" of the degree in Tourism that broadens and deepens the knowledge about Descriptive Statistics and statistical sources of tourism information.

This course provides knowledge that is useful in the subject Tourism Forecasting Methods that is taught in the first semester of the fourth year of this degree. A set of techniques to make forecasts are taught.

2.2 Recommendations

To have basic knowledge of Algebra and Mathematical Analysis. This subject is linked to analytics that use quantitative techniques.

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3. Objectives (as result of teaching):

- Access different sources of tourist information, manage, select and analyse them in a critical, synthetic, relational and interpretative way.
- Apply theoretical knowledge in practice.
- Know the importance of research in tourism and be able to turn an empirical problem into a research topic and draw conclusions.
- Know the educational resources available at the University of Huelva and know how to use them appropriately.
- Know and apply information and communication technologies (ICT) in the different areas of the tourism sector.
- Know quantitative and qualitative methods applied to tourism.
- Handle statistical information to develop trends and forecasts.
- Work in a foreign language.

4. Skills to be acquired

4.1 Specific Skills:

- (SC35) Study tourism trends and instability factors in tourism.
(SC36) Assess tourism potentials and prospective analysis of their exploitation.
(SC40) Handle statistical information to develop trends and forecasts.
(SC46) Work in a foreign language.

4.2 General, Basic or Transversal Skills:

- (BC1) Demonstrate to understand and have acquired knowledge about an area of study that starts from basic Secondary Education, and is often at supported by advanced textbooks, but also includes some aspects that involve knowledge related to the forefront of their field of study.
- (BC2) Know how to apply their knowledge to their work or vocation in a professional way. They should also possess the skills that are usually demonstrated through the elaboration and defence of arguments and in problem solving within their area of study.
- (BC3) Gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.
- (BC4) Be able to convey information, ideas, problems and solutions to both specialised and non-specialised audiences.
- (BC5) Develop the learning skills required to undertake further studies with a high degree of autonomy.
- (GC1) Develop cognitive, instrumental and attitudinal competences in the context of the tourism sector.
- (TC1) Be completely fluent in Spanish, mastering the different styles and the specific languages required to develop and communicate the acquired knowledge in the scientific and academic environment.
- (TC2) Develop a critical attitude, being able to analyse and synthesize.
- (TC3) Develop an attitude of inquiry that permanently enables to review and deepen in the knowledge.
- (TC4) Acquire Computer and Information Skills (CI2) and apply them working.
- (TC6) To promote, respect and safeguard human rights, democratic values, social equality and environmental sustainability, without discrimination on the basis of birth, race, sex, religion, opinion or other personal or social circumstances.

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5. Training Activities and Teaching Methods

5.1 Training Activities:

- Theoretical/practical classes about the contents of the syllabus.
- Supervised activities by lecturers: seminars, conferences, development of assignments, debates, group tutorials, assessment/self-assessment activities.
- Individual / autonomous work of the student.

5.2 Teaching Methods:

- Face-to-face theoretical classes.
- Face-to-face practical classes.
- Autonomous supervised work of the student.
- Assessment tests.
- Tutorials.

5.3 Development and Justification:

Methodology	Activity	Description	No. of hours
Face-to-face classes about the theoretical and practical contents of the course.	Theoretical classes (Large groups)	Lectures by teachers, in which the participation of students in the classroom (discussions) is encouraged. Foundations and theoretical approaches	22.5
		Presentation and discussion of reports by students	
	Practical classes (Small groups)	Problems and case studies: approaches and solutions to specific problems related to the subject.	
		Development of IT skills for subject-specific software.	
Individual / autonomous work of the student	Individual preparation of essays on theory and practical applications (following tutor's suggestions). Autonomous study of subject contents.	Documentation. Background reading, e.g. articles. Use of IT. Problem solving and case-study preparation. Theoretical (concepts and principles) and practical contents of the subject. Students independently explore topics not covered by lectures.	52.5

All the necessary material to follow the theoretical and practical classes will be available on the online (distance) learning platform, Moodle (<https://moodle.uhu.es/>). The page will contain information about the contents of the subject, the work plan, the schedule of lectures and practicals, as well as interesting links about the subject.

Lectures will make use of the whiteboard (traditional and electronic version), computer presentations and supplementary material provided by the lecturer (photocopies, electronic files, etc.). The practical classes will focus on applying the content addressed in the lectures, with an emphasis on solving problems, the limitations and advantages of the techniques studied, and critical analysis of the results obtained. These practical sessions will be interactive and the participation of students will be taken into account when assessing to the extent to which learning has taken place.

For practical classes there will be computers available in the computer classrooms at the Faculty.

6. Detailed Contents

PART I. STATISTICAL DATA SOURCES

Unit 1 Tourism and its units of analysis

- 1.1. The heterogeneity and the complexity of tourism
- 1.2. The homogenization of concepts related to the tourism sector
- 1.3. The variables that measure activity in the tourism sector from the point of view of demand and supply

Unit 2 Obtaining information on tourism

- 2.1. The origin and the organization of information
- 2.2. Obtaining information through surveys
- 2.3. European and world tourism statistics
- 2.4. Spanish tourism statistics

Unit 3 Statistics to analyze tourist demand and spending

- 3.1. Survey on Domestic and Outbound Tourism by Spanish Residents (FAMILITUR)
- 3.2. Inbound Tourism Survey (FRONTUR)
- 3.3. Tourist Expenditure Survey (EGATUR)
- 3.4. Survey of tourist habits (HABITUR)
- 3.5. Survey of Andalusian Tourism Situation (ECTA)

Unit 4 Statistics to analyze tourist supply

- 4.1. Occupancy Surveys: hotel, campsite, holiday dwellings, rural tourism accommodation
- 4.2. Survey of Tourist Occupancy (OCUPATUR)
- 4.3. Annual Survey of Services
- 4.4. Hotel price index and hotel income index
- 4.5. Indicators on the profitability of the hotel sector

Unit 5 Labour market statistics in tourism

- 5.1. Economically Active Population Survey
- 5.2. Social Security Affiliation
- 5.3. Wage Structure Survey
- 5.4. Labour Cost Survey
- 5.5. Employment Situation Survey

Unit 6 Tourism Satellite Account

- 6.1. Definition and objectives of the Tourism Satellite Account
- 6.2. Methodology of the Tourism Satellite Account
- 6.3. The structure and components of the Tourism Satellite Account
- 6.4. The Tourism Satellite Account for Spain and Andalusia

PART II. EXTENSION OF DESCRIPTIVE STATISTICS

Unit 7 Classical time series analysis

- 7.1. Introduction. Components of a time series
- 7.2. Analysis of the trend. Methods for its determination
- 7.3. Analysis of the seasonality. Seasonal adjustment of a time series
- 7.4. Determination of the components using the classical analysis
- 7.5. Variation rates in time series analysis

Unit 8 Statistics of attributes

- 8.1. Introduction
- 8.2. Statistics of attributes: 2x2 and h x k contingency tables
- 8.3. Coefficients of association: 2x2 tables
- 8.4. Contingency coefficients: h x k tables
- 8.5. Spearman's rank correlation

7. Bibliography

7.1 Basic Bibliography:

- FERNÁNDEZ, A. and LACOMBA, B. (2003): *Técnicas Estadísticas para el Turismo: Nociones Teóricas y Problemas Resueltos*, Ágora, Málaga.
- LODEIRO, M. J. and ARRANZ, M. (1998): *Indicadores Estadísticos del Sector Turístico*, Mundiprensa, Madrid.
- MARTÍN PLIEGO, F. J. (2004): *Introducción a la Estadística Económica y Empresarial (Teoría y Práctica)*, Thomson, Madrid. 3th edition.
- PÉREZ LÓPEZ, C. (2002): *Estadística Aplicada a través de Excel*, Pearson, Madrid.

7.2 Additional Bibliography:

SPECIFIC REFERENCES

- ALEGRE, J., CLADERA, M. and JUANEDA, C. N. (2003): *Análisis Cuantitativo de la Actividad Turística*, Pirámide, Madrid.
- ARNALDOS GARCÍA, F., DÍAZ DELFA, M. T., FAURA MARTÍNEZ, U., MOLERA PERIS, L. and PARRA FRUTOS, I. (2003): *Estadística Descriptiva para Economía y Administración de Empresas. Cuestiones tipo test y ejercicios con Microsoft Excel*, Thomson, Madrid.
- CONSEJERÍA DE TURISMO Y DEPORTE (2000): *Sistema de Análisis y Estadística del Turismo de Andalucía 2000-2004. Plan de Actuación 2000-2004*, Consejería de Turismo y Deporte, Junta de Andalucía, Sevilla.
- FERNÁNDEZ AGUADO, C. (1993): *Manual de Estadística Descriptiva Aplicada al Sector Turístico*, Síntesis, Madrid.
- FERNÁNDEZ, C. and FUENTES, F. (1995): *Curso de Estadística Descriptiva. Teoría y Práctica*, Ariel, Barcelona.
- FERNÁNDEZ, A. and LACOMBA, B. (2000): *Estadística Básica Aplicada al Sector Turístico. Teoría y Problemas Resueltos*, Ágora, Málaga.
- GONZÁLEZ-CONDE LLOPIS, C. (1999): *Fuentes de Información Estadística*, Ediciones de la Universidad Autónoma de Madrid, Madrid.
- PARRA, E. and CALERO, F. J. (Coords.) (2007): *Estadística para Turismo*, McGraw-Hill, Madrid.
- RAYA VÍLCHEZ, J. M. (2004): *Estadística Aplicada al Turismo*, Pearson Educación, Madrid.
- PÉREZ SUÁREZ, R. (1993): *Análisis de Datos Económicos I. Métodos Descriptivos*, Pirámide, Madrid.
- RONQUILLO, A. (1997): *Estadística Aplicada al Sector Turístico. Técnicas Cuantitativas y Cualitativas de Análisis Turístico*, Centro de Estudios Ramón Areces, Madrid.
- SANTOS, J., MUÑOZ, A. and MUÑOZ, A. (2007): *Estadística para Estudios de Turismo*, Ediciones Académicas, Madrid.
- SANZ, J. A., BEDATE, A., RIVAS, A. and GONZÁLEZ, J. (1996): *Problemas de Estadística Descriptiva Empresarial*, Ariel, Barcelona.

OTHER ONLINE SOURCES OF INFORMATION

- Banco de España (BDE): <https://www.bde.es/wbe/es/>
- Consejería de Turismo y Andalucía Exterior: <https://www.juntadeandalucia.es/organismos/turismoyandaluciaexterior.html>
- EUROSTAT: <https://ec.europa.eu/eurostat>
- Instituto de Estadística y Cartografía de Andalucía: <https://www.juntadeandalucia.es/institutodeestadisticaycartografia/>
- TURESPAÑA: <https://www.tourspain.es/es-es>
- Instituto Nacional de Estadística: <https://www.ine.es>
- Ministerio de Trabajo y Economía Social: <https://www.mites.gob.es/>
- Ministerio de Industria y Turismo: <https://www.mincotur.gob.es/es-ES/Paginas/index.aspx>
- United Nations: <https://www.un.org/es/>
- World Tourism Organisation (WTO): <https://www.unwto.org/es>
- Organisation for Economic Co-operation and Development (OECD): <https://www.oecd.org/>

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8. Systems and Assessment Criteria

8.1 System for Assessment:

- Written/oral exam.
- Continuous assessment.

8.2 Assessment Criteria and Marks:

8.2.1 Examinations Convocatory I

Assessment form	Description	Criterion	Weight on the final mark
Written exam	Individual theoretical and practical test, in which the theoretical, practical and methodological knowledge will be assessed	• Ability to solve problems and apply the theoretical contents to practice. • Ability to summarise. • Knowledge and understanding of the contents. • Absence of errors. • Appropriate use of concepts and terminology. • Internal coherence of the exercise and between it and all the knowledge. • Correctness in the use of spelling, grammar and syntax. • Ability to interrelate theories, models and concepts. • Precision and accuracy of the answers. • Capacity of students to plan, develop and present an empirical work on different facets of the subject. • Oral and written communication ability of the student. • Ability to use software and information-communication technologies. • Use of the educational media of the University of Huelva available to students.	70%
Continuous assessment	Continuous assessment can consist of: • Written and oral tests. • Empirical works on different aspects of the subject and their presentation. • Different types of practical assignments. • Active participation in seminars, workshops and other activities related to course contents. • Other activities and tests to reach learning objectives of the course.	• Ability to solve problems and apply the theoretical contents to practice. • Ability to summarise. • Knowledge and understanding of the contents. • Absence of errors. • Appropriate use of concepts and terminology. • Internal coherence of the exercise and between it and all the knowledge. • Correctness in the use of spelling, grammar and syntax. • Ability to interrelate theories, models and concepts. • Precision and accuracy of the answers. • Capacity of students to plan, develop and present an empirical work on different facets of the subject. • Oral and written communication ability of the student. • Ability to use software and information-communication technologies. • Use of the educational media of the University of Huelva available to students.	30%

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The set of evaluation activities shall be subject to the Policy of Evaluation for undergraduate and postgraduate degrees at the Universidad de Huelva (the Governing Council of March 13, 2019): https://uhu.es/secretaria-general/sites/secretaria-general/files/2021-02/Rgto_evaluacion_grado_mofs_ccgg_19_03_13.pdf

Rating system

The rating system used in this subject is in accordance with that set out in article 5 of Royal Decree 1125/2003, of September 5, which establishes the European credit system and the grading system for official university degrees and which is valid in all Spain. Results obtained by the student in each subject of the curriculum will be graded according to the following numerical scale from 0 to 10, with one decimal place, to which may be added the corresponding qualitative rating:

- 0.0 to 4.9: D. Fail (Suspendo)
- 5.0 to 6.9: Grade C (Aprobado)
- 7.0 to 8.9: Grade B (Notable)
- 9.0-10: Grade A (Sobresaliente)

The weighted average of the marks obtained by the student in the different types of assessment described in the previous table must be at least 5 in order to pass the subject. Students must achieve a minimum mark of 3 out of 10 in each of the evaluation methods described in the table above so that they can pass the subject and, therefore, the acquisition of the competence in the subject is guaranteed. In those cases in which more than one activity is evaluated for a specific type of assessment, all of them will be weighted equally and, for the purpose of the minimum indicated in this paragraph, the arithmetic mean of these activities will be considered to verify if students have reached the minimum.

The written exams that evaluate the theoretical and practical contents can be passed throughout the course by means of periodic exams if the lecturers consider it appropriate. For these purposes, for the calculation of the average, all periodic tests will be weighted equally. In the case of a pass, they will substitute the final written exam in relation to the same content.

A practical application will be used by software in the computer classroom as a complement to the written exam and in substitution of the continuous evaluation and/or course work, in the resit exams that are listed below:

- Resit exam if continuous evaluation has not been passed.
- Resit exam in the following academic year, for students who choose a final single evaluation.
- Resit exam to complete a degree.
- Resit exam for students on mobility programmes.
- Final appeal exam by special dispensation.

The student must prove the acquisition of all the skills related to the practical application by software in the computer room and must obtain a minimum grade of 3 to be able to pass the subject in which it will have a weight equivalent to the tests of continuous evaluation and/or course work shown in the previous table (30%).

The evaluation criteria used in the different activities will correspond in general with the competences related in this guide and, in particular, they are specified with no intention to be exhaustive in the following list:

- Ability to solve problems and apply the theoretical contents to practice.
- Ability to summarise.
- Knowledge and understanding of the contents.
- Absence of errors.
- Appropriate use of concepts and terminology.
- Internal coherence of the exercise and between it and all the knowledge.
- Correctness in the use of spelling, grammar and syntax.
- Ability to interrelate theories, models and concepts.
- Precision and accuracy of the answers.
- Capacity of students to plan, develop and present an empirical work on different facets of the subject.
- Oral and written communication ability of the student.
- Ability to use software and information-communication technologies.
- Use of the educational media of the University of Huelva available to students.

Those students who have a B (Notable) final grade in the subject may request to increase their final grade to the coordinator of the subject. This will be done in writing to the Secretary Office of the Department. In this case, the teacher will suggest to the student an individual activity for that purpose. If the mark for this activity is equal to or greater than 5 on a numerical scale from 0 to 10, up to 2 points can be added to the student's final grade depending on the mark obtained in the activity up to a maximum grade of 10.

The mention "honors" will be awarded to students who have obtained a mark equal to or greater than 9.0. The number of mentions "honors" may not exceed 5% of the students registered in a subject in the same academic year, unless the number of students registered is less than 20, in which case, a single "honors" may be awarded.

For the calculation of the maximum number of honors, the number of students will be rounded up to the next highest number and students from the University of Huelva who are studying at another university within the framework of a national or international mobility programme will not be considered for the calculation. These students' grades at the destination university will be recognised, regardless of whether the quota has been completed with students who take the subject at the University of Huelva.

When there is more than one student who meets the requirements to obtain the mention "honors" and the maximum number

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of mentions "honors" has been reached, the mention "honors" will be awarded to the one with the highest final grade. In those cases in which the students who opt for the mention "honors" have the same final grade, the lecturer will suggest an activity consisting of the preparation of an essay or individual work to those students so that a mention "honors" will be awarded to the student who has the highest score in this activity on a numerical scale from 0 to 10.

The student who decides not to take the written exam will be included in the record with the notation of Absent (No presentado).

Students have the right to take 2 out of 3 ordinary examinations. These exams have a maximum duration of three hours and must allow to evaluate 100% of the subject.

Ordinary examination I or course exam. It will consist of a written exam according to the characteristics and weights described in the table presented at the beginning of this section. The mark in this exam will be computed by means of the weighted average of the grade obtained in the continuous assessment and written exam, unless the student has opted for the final single evaluation test according to what is established in the Policy of Evaluation for undergraduate and postgraduate degrees at the Universidad de Huelva (the Governing Council of March 13, 2019). For the students to pass the subject it will be necessary that they achieve a minimum mark of 3 out of 10 in each of the evaluation methods and the weighted arithmetic mean is at least 5.

8.2.2 Examinations Convocatory II

Ordinary examination II or resit exam. It will consist of a written exam according to the characteristics and weights described in the previous section. The mark of this exam will be determined by means of the weighted average of the grade obtained in continuous assessment and the written exam, provided that the student has obtained a grade of at least 3 in continuous assessment and unless he has opted for the final single evaluation test as stated in the Policy of Evaluation for undergraduate and postgraduate degrees at the Universidad de Huelva (the Governing Council of March 13, 2019). Students will pass the subject if the weighted arithmetic mean of the different types of assessment is at least 5. If students do not exceed the minimum mark of 3 required in the continuous evaluation, the tests of this examination will have the same structure as those for the final single evaluation test.

8.2.3 Examinations Convocatory III

Ordinary examination III or resit exam in the following academic year. The tests of this examination will have the same structure as those for the final single evaluation test.

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8.2.4 Extraordinary Convocatory

Extraordinary examination. The tests of this examination will have the same structure as those for the final single evaluation test.

8.3 Single Final Evaluation:

Students will be able to benefit from the final single evaluation when they send an email from their email account of the University of Huelva to the lecturer in the first two weeks of the subject or in the two weeks following enrollment if it has occurred after the beginning of the subject according to the Policy of Evaluation for undergraduate and postgraduate degrees at the Universidad de Huelva. This will imply the express waiver of continuous evaluation and students will not be able to change to the other system. Nonetheless, in exceptional and duly justified cases, students will be able to apply for the final single evaluation outside the aforementioned deadlines, under the same administrative procedure.

The final single evaluation is carried out in a single academic act and will have a maximum duration of 3 hours. The final single evaluation will consist of a written exam with the characteristics and weights shown above and a practical application using software in computer rooms whose weight will be 30% (equivalent to the weight of continuous assessment and/or course work). It will be necessary that students obtain a minimum grade of 3 in both tests and the weighted average of both tests is equal to or greater than 5 to pass 100% of the subject.