

TEACHING GUIDE

COMPUTER TECHNOLOGIES APPLIED TO TOURISM MANAGEMENT

GRADO EN TURISMO (INGLÉS)

ACADEMIC YEAR 2026-27

Publication date: 01-07-2026



I.-Subject Identification

Type	FORMACIÓN BÁSICA
Teaching period	2 course, 2Q semester
Nº of credits	6
Language in which the subject is taught	English

II.-Presentation

Information and communication technologies (ICT) used in tourism companies—specifically those that enable the distribution and commercialization of tourism products—have become a fundamental requirement for competitiveness. Therefore, the course “Computer Technologies applied to Tourism Management” aims to address students’ training needs in the basic knowledge and operation of two of these technologies: Amadeus and Opera Cloud.

With regard to the Amadeus Global Distribution System (Amadeus GDS), one of the most widely used and capable systems in the sector, the course provides students with two types of content organized into two main blocks in order to achieve the overall learning objectives. The first block covers preliminary concepts and tools related to global distribution systems, as well as the creation and management of airline reservations. The second block focuses on fare pricing and ticket issuance. These processes and core software concepts of Amadeus equip students with the foundational skills required for entry-level performance as travel agents.

Concerning Opera Cloud PMS (Property Management Systems), the course seeks to meet students’ training needs in the basic understanding and use of this technology by providing them with significant and relevant procedural content related to lodging management and control.

Training in the Opera PMS begins with reservation handling and includes guest check-in and check-out processes. Subsequently, students learn how to carry out hotel closure procedures, billing, and daily auditing operations. To this end, they are introduced to the specific terminology, as well as the essential concepts and processes required for the effective use of the application, enabling them to begin and develop professionally within the hospitality sector.

III.-Learning outcomes

CG10. Knowledge of information systems relating to the field of study
 CG18. Ability to solve problems
 CE03. Analysis and use of information and communications technology in the different areas of the tourism industry.
 CE13. Knowledge of accommodation operating procedures.
 CE18. Knowledge to be acquired in the area of intermediary company operating procedures.

- Key for degrees not adapted to RD 822/21: **CB** - basic competences, **CG** - generic competences, **CE** - specific competences, **CT** - transversal competences.
- Key for degrees adapted to RD 822/21: **CON** - knowledge, **COM** - competences, **HAB** - skills.



IV.-Contents

IV.A.-Syllabus

Thematic Unit	Topic	Sections
1.- MANAGEMENT AND CONTROL OF COMPUTER SYSTEMS FOR MANAGEMENT, RESERVATIONS, AND DISTRIBUTION IN HOSTING COMPANIES - PMS: OPERA CLOUD (ORACLE)		
	Topic 1. Introduction to Opera	
	Topic 2. Client relations: Profiles / Cardex	2.1. Creating and modifying a new profile 2.2. Profile Options
	Topic 3. Reservations	3.1. Manage Reservation 3.2. Reservation Options
	Topic 4. Front Desk	4.1. Arrivals - Check-in 4.2. Front Desk Workspace 4.3. In house
	Topic 5. Departures	5.1. Check-out 5.2. Billing
2.- GDS AMADEUS (Amadeus IT Group)		
1. MANAGEMENT OF THE INFORMATION AND CREATION OF RESERVATIONS	Topic 6. Introduction to the GDS AMADEUS	6.1. Concept of DMS 6.2. Air Availability Query 6.3 Fare Query
	Topic 7. Booking Creation and Quotation (PNR and TST)	7.1. Mandatory PNR Elements 7.2 Quote and generation of TST
	Topic 8. Creation and Quotation of Optional Elements	8.1. Optional Elements (SSR) 8.2. Quotation of optional elements (TSM) 8.3 Other Information Elements
	Topic 9. Elements and Ticket Issuance	9.1. Mandatory Ticket Issuance Elements 9.2. Issuance Process

IV.B.-Training activities

Type	Title
Resolution of exercises, problems, case studies	Exercises, problems and cases of Opera and Amadeus



Resolution of exercises, problems, case studies	Preparation of theoretical and practical exams: Opera and Amadeus
Test and/or exams	Theoretical and practical exams: Opera and Amadeus
Theoretical sessions	Theoretical explanations of Opera and Amadeus
Academic tutorials	Tutorship with autonomous practices

V.-Student workload	
Theoretical sessions	17
Resolution of exercises, problems, case studies, etc.	17
Practical sessions in experimental, technological and clinical laboratories, fieldwork, etc.	18
Tests and/or exams	8
Academic tutorials	28
Related activities: conferences, seminars, etc.	20
Preparation of theoretical sessions and self-study	22
Preparation of practical tasks, exercises, case studies, projects, etc.	30
Preparation for tests and/or exams	20
Total student workload	180

VI.-Methodology and academic programme		
Type	Period	Content
Practical sessions	Week 1 to Week 7	OPERA PRACTICAL EXERCISES computer lab/classroom with computers. Topic 2. Profiles - Cardex / Topic 3. Reservations / Topic 4. Reception / Topic 5. Cashier (Billing)
Theoretical sessions	Week 1 to Week 7	OPERA THEORY Topic 1. Introduction to Opera./ Topic 2. Profiles-Cardex/ Topic 3. Reservations./ Topic 4. Front desk./ Topic 5. Departures.
Practical sessions	Week 8 to Week 14	AMADEUS PRACTICAL EXERCISES. Practical sessions at laboratory/computer room with computers. Topic 6. Introduction to GDS AMADEUS, Topic 7. Creation and quotation of reservations (PNR and TST), Topic 8. Creation and quotation of optional elements, Topic 9. Elements and ticketing.



Theoretical sessions	Week 8 to Week 14	AMADEUS THEORY. Topic 6. Introduction to AMADEUS GDS, Topic 7. Creating and quoting reservations (PNR and TST), Topic 8. Creating and quoting optional elements, Topic 9. Elements and ticketing.
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VII.-Assessment methods

The general assessment method is continuous as established in the *Regulation for the Assessment of Learning Outcomes* of Rey Juan Carlos University.

All the assessment systems established in the degree report must be employed, except for those that have a minimum weight of 0%, which can be used by professors in the academic years they consider relevant. Each assessment system may be applied through one or more assessment activities, consistent with the system. No assessment activity can exceed individually 60% of the overall grade for the subject.

The sum of non re-evaluable activities cannot exceed 40% of the overall grade for the subject and, in general, should not have an established minimum grade (except for practical activities in which, strictly speaking, the conditions of the ordinary call cannot be reproduced in the extraordinary call).

Those students who do not manage to pass the subject in the ordinary call, or do not attend this first call, may attend the extraordinary call only for failed re-evaluable assessment activities.

The distribution and characteristics of the assessment activities are described below.

VII.A.-Description and weight of the assessment activities

Evaluation system	Evaluation activity	Weighting	Revaluable in extraordinary	Minimum score	Contents	Date
FACE-TO-FACE TEST	Opera	20%	Reassessable	5 of 10	Chapters 1 to 5 Chapters 6 to 9	During the lessons period and/or at an official ordinary evaluation dates.
	Amadeus	15%	Not reassessable	No minimum mark required		
FACE-TO-FACE PRACTICAL EXAM	Opera	30%	Reassessable	5 of 10	Chapters 1 to 5 Chapters 6 to 9	During the lessons period and/or at an official ordinary evaluation dates.
	Amadeus	35%	Reassessable	5 of 10		

Calculation of the final or overall mark

- A pass mark of 5 is required for each of the softwares studied (Opera and Amadeus).
- The final mark is a weighted average (50% Amadeus and 50% Opera) of the marks obtained in each of them.
- If during the teaching period the student releases the Opera part, he/she only has to re-evaluate the Amadeus part and vice versa.
- The marks of the parts released from one course to another will not be kept.
- If one or more assessment activities have not been passed with the minimum grade, the final grade for the course will be a fail.
- If you have not taken ANY of the examinations, the final mark will be 'Not presented'.

Extraordinary call

- In the extraordinary call, only re-evaluable assessment activities in which the minimum mark has not been reached (or which have not been presented) can be re-evaluated.
- The re-evaluation will take place in person on the official date indicated for the extraordinary call.
- In order to pass the course, it is necessary to pass with a 5 in each of the programmes studied (Opera and Amadeus) and the overall grade must be a 5 or higher.

Other comments or clarifications

- The review of the assessment tests will take place on the date and at the place indicated by the teachers in the publication of the results of these assessments. Grades may be published on the virtual campus and/or the services portal.
- Due to the different types of tests to be taken by the student, teachers will set additional assessment dates to the official date. These dates will be indicated sufficiently in advance on the virtual campus.
- Students may not attend or take examinations outside the group in which they are enrolled. Under no circumstances will individual examinations be held outside the dates indicated by the teachers for each group.

Advanced call

In accordance with the URJC Assessment Regulations, art. 19.4, students may request that the assessment of one of the two calls be brought forward to September. The evaluation method will be similar to the general method of the ordinary call.

VII.B. Assessment of students with academic exemption from class attendance



Having Academic Exemption from Class Attendance (DAAC) does not imply that students are automatically exempt from participating in the continuous assessment activities or in the training activities of compulsory attendance as established in the teaching guide. Once the exemption has been granted, students must contact the subject's teaching staff, who will propose the adaptations he/she may consider relevant, as long as they guarantee the acquisition and adequate assessment of the learning goals established. Students must maintain adequate communication with the teaching staff so that they may provide information on the dates for training and assessment activities, if these are not established in the programme and available for students at the time of achieving the exemption.

Subject with possibility of academic exemption: Yes.

VII.C. Review of assessment activities

In accordance with the Regulation for the Assessment of Learning Outcomes of Rey Juan Carlos University.

VII.D.-Students with a disability or special educational needs

In order to guarantee equal opportunities, non-discrimination, universal accessibility and academic success, students with disabilities or especial education needs may request curricular adaptations to follow their studies. These adaptations will be provided by the Unit of Attention to People with Disabilities of Rey Juan Carlos University, in accordance with the regulation which regulates the service for the Attention of People with Disabilities at the University. This Unit will issue a report for curricular adaptations, so that students with disabilities or special education needs must contact the service (at e-mail discapacidad.programa@urjc.es) in order to provide relevant information for different educational alternatives.

VII.E.-Academic behaviour, academic integrity and honesty

Rey Juan Carlos University is fully committed to the highest standards of academic integrity and honesty, so studying at the URJC means assuming and subscribing to the values of integrity and academic honesty set out in the University's Ethical Code. To support this process, the University has Rey Juan Carlos University's Academic Conduct Regulation as well as different tools (anti-plagiarism, supervision...) that offer a collective guarantee for the full development of these essential values.

VIII.-Teaching resources and materials

Basic bibliography

AMADEUS SELLING PLATFORM:

- (2017): "Guía de referencia rápida de Amadeus Selling Platform" http://www.amadeus.com/web/amadeus/es_ESES/

Agenciasde-viajes/Recursos-y-descargas

- Additional resources on Blog del experto: [http://www.elblogdelexperto.com/reservas-aereas/un-suenno-hechorealidadllegaamadeusselling-](http://www.elblogdelexperto.com/reservas-aereas/un-suenno-hechorealidadllegaamadeusselling-platform-connect.asp)

platform-connect.asp

OPERA CLOUD

- USER GUIDE : https://docs.oracle.com/cd/F18689_01/doc.193/f33329/toc.htm

- COURSES: <https://learn.oracle.com/ols/course-list/82701>

-VIDEOS: [https://docs.oracle.com/en/industries/hospitality/operacloud/](https://docs.oracle.com/en/industries/hospitality/operacloud/21.5/ocsuh/part_opera_cloud_videos.htm#OPERACloudVideos-E599A0ED)

21.5/ocsuh/part_opera_cloud_videos.htm#OPERACloudVideos-E599A0ED

Consultation bibliography

González, L. y Talón P. (2006): Dirección Hotelera: Operaciones y Procesos, Ed. Síntesis.

Talón, P., González, L. y Segovia, M. (2012): El Yield-Revenue Management en la gestión hotelera, Ed. Delta.

IX.-Professors

Name and surname	ALBERTO AZUARA GRANDE
E-mail address	alberto.azuara@urjc.es
Department	Economía de la Empresa
Campus	Madrid - Vicálvaro
Category	Profesor/a Ayudante Doctor/a
Academic degree	Doctor
Person responsible for the subject	Yes
Tutorial timetable	Para consultar las tutorías póngase en contacto con el/la profesor/a a través de correo electrónico
Number of quinquennia	1
Number of sexennia	1
No. of positive evaluations by Docencia	2
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Category	Profesor/a Asociado/a
Person responsible for the subject	No
Tutorial timetable	Para consultar las tutorías póngase en contacto con el/la profesor/a a través de correo electrónico
Number of quinquennia	0
Number of sexennia	0
No. of positive evaluations by Docencia	0
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Campus	Madrid - Vicálvaro
Category	Profesor/a Permanente Laboral
Academic degree	Doctor
Person responsible for the subject	No
Tutorial timetable	Para consultar las tutorías póngase en contacto con el/la profesor/a a través de correo electrónico
Number of quinquennia	1
Number of sexennia	1
No. of positive evaluations by Docencia	2