

TEACHING GUIDE COMPUTER SCIENCE

GRADO EN ECONOMÍA (INGLÉS)

ACADEMIC YEAR 2026-27

Publication date: 04-07-2026



I.-Subject Identification

Type	FORMACIÓN BÁSICA
Teaching period	1 course, 2Q semester
Nº of credits	6
Language in which the subject is taught	English

II.-Presentation

Students will learn the fundamentals of obtaining, analyzing and managing economic and business information, assuring the accuracy and reliability of data. They will also learn the main concepts for preparing and delivering information efficiently. Students will acquire the capability to use professional software to create, analyze, retrieve and convey information in different formats, managing data effectively and efficiently. The skills acquired in the course will allow students to improve their performance in academic as well as in professional business environments.

NOTICE

Computers at the University labs run under the Windows operating system. Programs and versions will be specified by the lecturer.

CLASS ATTENDANCE RECOMMENDATIONS

Regular attendance is recommended due to the practical nature of the course. Following the activities carried out in the computer lab, along with the explanations and guidance provided by the instructor, helps students better understand the material and achieve the learning objectives.

As many skills are developed gradually through guided practice, attending weekly classes plays an important role in effectively acquiring the knowledge and competencies of the course.

III.-Learning outcomes

CT02. Ability to organise and plan
 CT05. Knowledge of information systems relating to the field of study
 CT06. Ability to analyse and search for information from different sources
 CT07. Ability to solve problems
 CT15. Ability to learn independently
 CT16. Ability to adapt to new situations
 CB04 . That students are able to transmit information, ideas, problems and solutions to both specialized and non-specialized audience.
 CE02. Information search and research skills

- 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

MODULE I. Professional writing of academic and economic reports and documents	I.1. Creating and editing academic and professional documents I.2. Advanced tools for building and managing complex documents I.3. Proofing and sharing documents
MODULE II. Planning and managing information in economics	II.1. Data organization in economics II.2. Creating and editing data II.3. Organizing and presenting economic data II.4. Preparing and analysing economic data II.5. Data visualization II.6. Protecting information

IV.B.-Training activities

Type	Title
Resolution of exercises, problems, case studies	Hands-on practice activities
Other activities	Presentation and explanation of content through various resources
Academic tutorials	Academic tutorial meetings
Other activities	Content comprehension and review



V.-Student workload	
Theoretical sessions	18
Resolution of exercises, problems, case studies, etc.	39
Practical sessions in experimental, technological and clinical laboratories, fieldwork, etc.	0
Tests and/or exams	3
Academic tutorials	30
Related activities: conferences, seminars, etc.	18
Preparation of theoretical sessions and self-study	18
Preparation of practical tasks, exercises, case studies, projects, etc.	44
Preparation for tests and/or exams	10
Total student workload	180

VI.-Methodology and academic programme		
Type	Period	Content
Theoretical sessions	Week 1 to Week 15	Presentation and explanation of content using various resources
Practical sessions	Week 1 to Week 15	Hands-on-practice activities
Academic tutorials	Week 1 to Week 15	Academic tutorials to clarify questions and address doubts
Other activities	Week 1 to Week 15	Student preparation of course content



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



1st - ORDINARY ASSESSMENT PERIOD

Module I (30%)

• **Course-work Module I (30%).** Contents Module I. Assignments will be defined by the lecturer in Aula virtual at the beginning of the module. Minimum mark: 5 out of 10. Retake option: Exam.

Module II (70%)

• **Course-work Module II (10%).** Contents Module II. Assignments will be defined by the lecturer in Aula virtual at the beginning of the module. Retake option: No. These activities cannot be re-evaluated in an extraordinary call, since the aim is for the student to face these activities as they acquire the knowledge of the subject in a way that represents a challenge and contributes to assimilating the methodology of the subject. The grade obtained in the continuous evaluation during the semester will be retained in the extraordinary call. The grade for these activities is cumulative with no minimum score required and will not be re-evaluated in the extraordinary call.

• **On-site exam Module II (60 %).** Contents Module II. On-site exam: it will be held at the university labs on the official evaluation date. Minimum mark: 5 out of 10. Retake option: Exam.

• To pass Module II, a minimum mark of 5 out of 10 is required in the weighted average of both activities, as well as the minimum required grade in the exam.

To pass the subject the student must have passed each module with a minimum mark of 5 out of 10 and she/he must have achieved the minimum mark required for each assessment activity. The course final mark is the weighted average of the marks obtained in both modules ($30\% \cdot \text{Module I} + 70\% \cdot \text{Module II}$). (*)

2nd - EXTRAORDINARY ASSESSMENT PERIOD

On-site: The exams will be held in the university labs on the official assessment date. Students will take an in-person exam for the module or modules they failed in the first assessment period (if applicable). The grade for any module passed in the first assessment period will be retained.

Module I (30%)

• **On-site exam Module I (30%).** Contents Module I. Minimum mark: 5 out of 10.

Module II (70%)

• **Course-work Module II (10%).** Contents Module II. The grade obtained in the ordinary assessment period is retained.

• **On-site exam Module II (60 %).** Contents Module II. Minimum mark: 5 out of 10.

• To pass Module II, a minimum mark of 5 out of 10 is required in the weighted average of both activities, as well as the minimum required grade in the exam.

The course final mark will be the weighted average of both modules ($30\% \cdot \text{Module I} + 70\% \cdot \text{Module II}$). To pass the subject the student must have passed each module with a minimum mark of 5 out of 10. (*)

EARLY ASSESSMENT PERIOD (Convocatoria adelantada)

Only applicable to the cases included in the Regulations for the Evaluation of Learning Results of the Rey Juan Carlos University.

On-site: it will be held at the university labs, on the official evaluation date.

Module I (30%)

• **On-site exam Module I (30%).** Contents Module I. On-site exam: it will be held at the university labs on the official evaluation date. Minimum mark: 5 out of 10.

Module II (70%)

• **On-site exam Module II (70 %).** Contents Module II. On-site exam: it will be held at the university labs on the official evaluation date. Minimum mark: 5 out of 10. .

The course final mark will be the weighted average of both modules ($30\% \cdot \text{Module I} + 70\% \cdot \text{Module II}$). To pass the subject the student must have passed each module with a minimum mark of 5 out of 10. (*)

(*) If the student does not achieve the minimum required mark in any of the modules or assessment activities, they will receive a numerical grade below 5 which, in the instructor's judgment, best reflects the student's overall performance in the course.

VERY IMPORTANT: Any student involved in any form of academic misconduct (in activities and/or assessment tests) will be



committing a serious offense, in accordance with the "Normativa de Convivencia" of Universidad Rey Juan Carlos, and will be subject to the sanctions established therein.

CLASS ATTENDANCE RECOMMENDATIONS: Regular attendance is recommended due to the practical nature of the course. Following the activities carried out in the computer lab, along with the explanations and guidance provided by the instructor, helps students better understand the material and achieve the learning objectives.

As many skills are developed gradually through guided practice, attending weekly classes plays an important role in effectively acquiring the knowledge and competencies of the course.

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

Up up and array! : dynamic array formulas for Excel 365 and beyond. Abbott Ira Katz. New York, New York : Apress ; 2023. ISBN : 1-4842-8966-8
Using Excel for business and financial modelling: A practical guide. (3d ed.). Fairhurst, D.Chichester, West Sussex: Wiley. 2019. ISBN: 978-1-119-52038-2
Microsoft Excel 2016 Data Analysis and Business Modeling. Author: Winston, Wayne. Publisher: Microsoft Press, 2016. Web ISBN-13: 9781509304233
Microsoft Excel 365 Bible. Michael. Alexander ; Dick Kusleika. 2nd ed.; Newark: John Wiley & Sons, Incorporated; 2022. ISBN: 9781119835226
Exploring Microsoft Excel's Hidden Treasures. David Ringstrom. Packt Publishing; 2022. ISBN: 9781803243948
Excel 2016 Bible. John Walkenbach Publisher: John Wiley & Sons, 2015. Print ISBN-13: 9781119067511
Microsoft 365 Word Tips and Tricks. Heather Ackmann, Ramit Arora, Bill Kulterman. Packt Publishing; 2021. ISBN: 9781800565432
Creating Research and Scientific Documents Using Microsoft Word. Author: Alexander Mamishev. Editor: Microsoft Press, 2013. ISBN: 0735670447
Microsoft Word Secrets: The Why and How of Getting Word to Do What You Want. Morgado, F. Berkeley, CA : Apress : Imprint: Apress, 2017. ISBN: 9781484230770
Building Complex Documents: Using Microsoft Word 2007, 2010, and 2013. Author: F. Mark Schiavone. Editor: Sycamore Technical, 2014. ISBN: 0615966217

Consultation bibliography

Microsoft excel power pivot & power query for dummies. (2nd ed.). Alexander, M. Hoboken, New Jersey: John Wiley & Sons, Inc., 2022. ISBN: 1-119-84450-9
Financial Modeling in Excel for Dummies. Danielle Stein. Fairhurst. 2nd ed. ; Newark : John Wiley & Sons, Incorporated ; 2022. ISBN: 1-119-84453-3
Office 365 all-in-one for dummies / Peter Weverka, Matt Wade. Second edition. ; Hoboken, New Jersey : John Wiley & Sons, Incorporated ; 2022 ISBN : 1-119-83073-7
Building Financial Models with Microsoft® Excel®: A Guide for Business Professionals, Second Edition By: K. Scott Proctor Publisher: John Wiley & Sons, 2009 Print ISBN: 9780470481745
Microsoft Excel Formulas and Functions (Office 2021 and Microsoft 365). Microsoft Press ; 2022. ISBN: 0-13-755926-7
Advanced Excel success: A practical guide to mastering Excel. (1st ed.). Murray, A. New York: Apress L. P., 2021. ISBN: 1-4842-6467-3
Excel 2016 Formulas and Functions. Paul McFedries Publisher: Que Pub., 2015. Web ISBN: 9780134269078
Excel Dashboards and Reports, 2nd Edition. Michael Alexander; John Walkenbach Publisher: John Wiley & Sons , 2013 Web ISBN: 9781118490433
Excel data analysis: your visual blueprint for analyzing data, charts, and PivotTables. McFedries, Paul; Publisher: Visual, 2013. eISBN: 9781118780329
Marketing Analytics: Data-Driven Techniques with Microsoft Excel. Winston, Wayne. John Wiley & Sons, Inc., 2014. ISBN: 978-1-118-37343-9
Hands-on financial modeling with Microsoft Excel 365 : build your own practical models for forecasting, valuation, trading, and growth analysis. Shmuel Oluwa. Second edition. ; Birmingham, England ; Mumbai : Packt ; 2022 ISBN : 1-80324-893-9

IX.-Professors

Name and surname	SONSOLES LEGUEY GALÁN
E-mail address	sonsoles.leguey@urjc.es
Department	Economía Financiera y Contabilidad
Campus	Madrid - Quintana



Category	Profesor/a Permanente Laboral
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	3
Number of sexennia	0
No. of positive evaluations by Docencia	4