Universitat d'Alacant
Universidad de Alicante

APPLIED PALAEONTOLOGY (2026-27)

Código:	Fecha de aprobación:	Precio:
D091	04/10/2016	35,34 1st registration credits
Créditos:	**Título:**	
60	Master (ECTS)	

RAMA
Sciences

PLAN
UNIVERSITY MASTER'S DEGREE IN APPLIED PALAEONTOLOGY

TIPO DE ENSEÑANZA
Face-to-face

CENTROS DONDE SE IMPARTE
Faculty of Science

ESTUDIO IMPARTIDO CONJUNTAMENTE CON
Universitat d'Alacant - Universidad de Alicante (Spain)
UNIVERSITAT DE VALÈNCIA ESTUDI GENERAL (Spain)

FECHAS DE EXAMEN
Acceda al listado de fechas de examen para esta titulación.

PLAN DE ESTUDIOS OFERTADO EN EL CURSO 2026-27

Nodo inicial: Seleccione el nodo inicial

Leyenda: No ofertada | Sin docencia

UNIVERSITY MASTER'S DEGREE IN APPLIED PALAEONTOLOGY

COMPULSORY SUBJECTS — 24 créditos

Curso	Título	Créditos	Subject
1	COMPULSORY	3	38350 - BIOSTRATIGRAPHY
1	COMPULSORY	4,50	38351 - PALAEOBIOLOGY AND SISTEMATIC PALAEONTOLOGY
1	COMPULSORY	3	38352 - TAPHONOMY AND ICHNOLOGY
1	COMPULSORY	3	38353 - PALAEOCOLOGY, PALAEOCLIMATOLOGY AND PALAEOBIOGEOGRAPHY
1	COMPULSORY	6	38354 - PALAEONTOLOGY FIELDWORK
1	COMPULSORY	4,50	38355 - LABORATORY TECHNIQUES AND ANALYTICAL METHODS IN PALAEONTOLOGY

OPTIONAL SUBJECTS — 30 créditos

OPTIONAL BASIC TRAINING — 6 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	3	38356 - SEDIMENTARY ENVIRONMENTS AND FOSSIL RECORD
1	OPTIONAL	3	38357 - INTERPRETATION OF GEOLOGICAL MAPS AND INTRODUCTION TO THE GEOLOGICAL CARTOGRAPHY
1	OPTIONAL	3	38358 - ANIMAL MORPHOLOGY AND DIVERSITY
1	OPTIONAL	3	38359 - DIVERSITY AND PHYLOGENY OF PLANTS AND FUNGI

COMMON OPTIONAL — 18 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	3	38360 - APPLIED MINERALOGY TO PALAEOENVIROMENTAL ANALYSIS
1	OPTIONAL	3	38361 - APPLIED MICROPALAEONTOLOGY
1	OPTIONAL	3	38362 - ENVIRONMENTAL GEOCHEMISTRY AND PALAEONTOLOGY
1	OPTIONAL	3	38363 - MUSEISTIC AND COMUNICATION OF THE PALAEONTOLOGICAL HERITAGE
1	OPTIONAL	3	38364 - PROYECTS AND SELF-EMPLOYMENT IN PALEONTOLOGY
1	OPTIONAL	3	38365 - MANAGMENT AND CONSERVATION OF PALAEONTOLOGICAL HERITAGE
1	OPTIONAL	3	38366 - GIS APPLICATIONS TO PALAEONTOLOGY
1	OPTIONAL	3	38367 - PALAEODIVERSITY AND EVOLUTION OF PLANTS
1	OPTIONAL	3	38368 - PALAEOBIODIVERSITY AND EVOLUTION OF VERTEBRATES
1	OPTIONAL	3	38369 - PALAEOBIODIVERSITY AND EVOLUTION OF INVERTEBRATES

OPTIONAL ROUTE — 6 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	6	38370 - ENTERPRISES OR INSTITUTIONS INTERNSHIPS
1	OPTIONAL	6	38371 - INITIATION TO SCIENTIFIC RESEARCH

MASTER FINAL WORK — 6 créditos

Curso	Título	Créditos	Subject
1	END OF MASTER WORK	6	38372 - MASTER'S DEGREE FINAL PROJECT

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START 2024

COMPULSORY SUBJETS — 24 créditos

Curso	Título	Créditos	Subject
1	COMPULSORY	3	38350 - BIOSTRATIGRAPHY
1	COMPULSORY	4,50	38351 - PALAEOBIOLOGY AND SISTEMATIC PALAEONTOLOGY
1	COMPULSORY	3	38352 - TAPHONOMY AND ICHNOLOGY

1	COMPULSORY	3	38353 - PALAEOCOLOGY, PALAEOCLIMATOLOGY AND PALAEOBIOGEOGRAPHY
1	COMPULSORY	6	38354 - PALAEONTOLOGY FIELDWORK
1	COMPULSORY	4,50	38355 - LABORATORY TECHNIQUES AND ANALYTICAL METHODS IN PALAEONTOLOGY

OPTIONAL SUBJECTS — 24 créditos

OPTIONAL BASIC TRAINING — 6 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	3	38356 - SEDIMENTARY ENVIRONMENTS AND FOSSIL RECORD
1	OPTIONAL	3	38357 - INTERPRETATION OF GEOLOGICAL MAPS AND INTRODUCTION TO THE GEOLOGICAL CARTOGRAPHY
1	OPTIONAL	3	38358 - ANIMAL MORPHOLOGY AND DIVERSITY
1	OPTIONAL	3	38359 - DIVERSITY AND PHYLOGENY OF PLANTS AND FUNGI

COMMON OPTIONAL — 18 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	3	38361 - APPLIED MICROPALAEONTOLOGY
1	OPTIONAL	3	38362 - ENVIRONMENTAL GEOCHEMISTRY AND PALAEONTOLOGY
1	OPTIONAL	3	38363 - MUSEISTIC AND COMUNICATION OF THE PALAEONTOLOGICAL HERITAGE
1	OPTIONAL	3	38364 - PROYECTS AND SELF-EMPLOYMENT IN PALEONTOLOGY
1	OPTIONAL	3	38365 - MANAGMENT AND CONSERVATION OF PALAEONTOLOGICAL HERITAGE
1	OPTIONAL	3	38366 - GIS APPLICATIONS TO PALAEONTOLOGY
1	OPTIONAL	3	38367 - PALAEODIVERSITY AND EVOLUTION OF PLANTS
1	OPTIONAL	3	38368 - PALAEOBIODIVERSITY AND EVOLUTION OF VERTEBRATES
1	OPTIONAL	3	38369 - PALAEOBIODIVERSITY AND EVOLUTION OF INVERTEBRATES
1	OPTIONAL	3	38374 - BIODIVERSITY AND EVOLUTION OF THE PRIMATES

MASTER FINAL WORK — 12 créditos

Curso	Título	Créditos	Subject
1	END OF MASTER WORK	12	38373 - MASTER'S DEGREE FINAL PROJECT

Superado este bloque se obtiene
MÁSTER UNIVERSITARIO EN PALEONTOLOGÍA APLICADA

PROFESSIONAL ROUTE

PROFESSIONAL ROUTE — 6 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	6	38370 - ENTERPRISES OR INSTITUTIONS INTERNSHIPS

Superado este bloque se obtiene
UNIVERSITY MASTER'S DEGREE IN APPLIED PALAEONTOLOGY. PROFESSIONAL ROUTE

RESEARCH ROUTE

RESEARCH ROUTE — 6 créditos

Curso	Título	Créditos	Subject
1	OPTIONAL	6	38371 - INITIATION TO SCIENTIFIC RESEARCH

Superado este bloque se obtiene
UNIVERSITY MASTER'S DEGREE IN APPLIED PALAEONTOLOGY. RESEARCH ROUTE

COMPETENCIAS

BASIC COMPETENCES

- CB6:Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context.
- CB7:Students should be able to apply their acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.
- CB8:That students are able to integrate knowledge and face the complexity of making judgements based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgements.
- CB9:Students are able to communicate their conclusions and the ultimate knowledge and rationale behind them to specialist and non-specialist audiences in a clear and unambiguous way.
- CB10:Students possess the learning skills that will enable them to continue studying in a largely self-directed or autonomous way.

GENERAL COMPETENCES (CG)

- CG1:Be able to work efficiently in a team in their professional or research work, acquiring the ability to participate in research projects and scientific or technological collaborations.
- CG2:To be able to make quick and effective decisions in complex situations in their professional or research work, through the development of new and innovative work methodologies adapted to the scientific/research, technological or professional field in which they carry out their activity.
- CG3:Be able to access the necessary information in the specific field of the subject (databases, scientific articles, etc.) and have sufficient criteria for its interpretation and use.
- CG4:Apply critical reasoning and argumentation based on rational criteria.
- CG5:To apply science from a social and economic point of view, promoting the transfer of knowledge to society.
- CG6:Ability to prepare, write and present reports and projects in public in a clear and coherent manner, to defend them with rigour and tolerance and to respond satisfactorily to any criticism that may arise from their presentation.

SPECIFIC COMPETENCES (CE)

- CE1:To have an in-depth knowledge and understanding of the nature of biodiversity and its ecosystemic relationships both now and in the past.
- CE2:To understand the nature of the fossil record in relation to the sedimentary process, the biostratinomic and phosildiagenetic phases of the process and the mechanisms of fossilisation.
- CE3:To know and understand the palaeodiversity of living beings, their ecosystemic relationships and the palaeogeographical distribution achieved by the main groups of living beings throughout the Earth's history.
- CE4:To know, understand and draw conclusions, applicable to the present time, about the crises of biological diversity, its causes and consequences within the framework of actualism.
- CE5:To understand in depth the historical nature of the evolutionary process, both in its aspects of unrepeatability and contingency, and in those linked to the fulfilment of laws of nature of all kinds and, therefore, of necessity.
- CE6:To know and understand past biological events, as well as the zonations, in time and space, of biota in order to establish the relative stratigraphic position of sedimentary rocks from different geographical areas.
- CE7:Know and be fluent in the divisions of the geological time scale, and the biostratigraphic scales constructed from different groups of biota in the fossil record.
- CE8:To be able to interpret environmental and ecological variables of the past from the study of trace organisms in the fossil record.
- CE9:To understand the nature of the stratigraphic record, its discontinuities, cycles and events, the different types of sedimentary basins, the factors controlling their infilling, the resulting three-dimensional geometries and stratigraphic correlations.
- CE10:To know the fundamental principles of facies analysis in continental, transitional and marine depositional systems, and the use of fossils for the palaeoenvironmental interpretation of the stratigraphic record.
- CE11:Collect, represent and analyse data for the interpretation and realisation of geological mapping and/or other modes of representation (stratigraphic columns, geological slices, etc.) with a view to their implementation in reports, scientific publications or other outputs.
- CE12:To know and understand in depth the regional geology of Spain and peripheral areas, and in particular of the Valencian Community, knowing in detail the main palaeontological landmarks represented in the deposits of the Iberian Peninsula and North Africa.
- CE13:To know and handle with dexterity the field, laboratory and laboratory techniques for the extraction, preparation, cataloguing, digital reconstructions, study and dissemination of microfossils and macrofossils.
- CE14:Know, elaborate and handle georeferenced databases of elements of the geological and palaeontological record, and programmes for the representation and spatial analysis of these elements.
- CE15:Know and understand the causes of climate change and the proxies (diatom studies, foraminifera, tree growth rings, ice cores, current climate data, etc.) used to characterise past climates.
- CE16:Know and understand the fundamentals of the use of microfossils and macrofossils for the characterisation of geological deposits containing resources such as oil, gas, coal, peat, etc.

- CE17:To know and understand the legal foundations at EU, Spanish State and Autonomous Community level on the protection and conservation of palaeontological heritage.
- CE18:To learn about the techniques used in museums for the management of palaeontological heritage, distinguishing successful cases in the field of palaeontology (Dinópolis, Institut Català de Paleontologia, Museo Paleontológico de Elche).
- CE19:To prepare, in a clear and concise manner, all types of reports related to palaeontological topics at an official or professional level (reports, subsidies, heritage impact reports, research projects, etc.).
- CE20:Be able to apply the research experience acquired in their own professional work, both in private companies and in public bodies.
- CE21:To carry out studies, applying the necessary methods and techniques to conserve and manage palaeontological heritage.
- CE22:Be able to plan and manage the available resources, taking into account the basic principles of quality, risk prevention, safety and sustainability.
- CE23:Be able to apply the research experience acquired to initiate the development of the research phase of a PhD programme on biodiversity-related topics.
- CE24:To develop experimental skills in the handling of laboratory material and equipment in palaeontology.

TRANSVERSAL COMPETENCES

- CT1:Be able to access information tools in other areas of knowledge and use them appropriately.
- CT2:Be able to assess the need to complete their scientific, historical, language, computer, literary, ethical, social and human training in general, by attending conferences or courses and/or carrying out complementary activities, self-evaluating the contribution that these activities make to their overall training.
- CT3:Projecting intellectual curiosity and encouraging responsibility for one's own learning.
- CT4:To assume an ethical commitment and sensitivity towards environmental problems, natural and cultural heritage.
- CT5:Ability to communicate and disseminate scientific ideas.

- Verified Report
- Resolution from the Universities Council: Positive verification
- Authorization from the Valencian Government

Internal Quality Assurance System (SGIC) of the Title

- Structure of the Centre for Quality
  - Comission of Internal Quality Guarantee
  - Other Commissions
- Handbook SGIC
- Procedures
  - Strategic (PE)
  - Key (PC)
  - Support (PA)
  - Measurement (PM)
- Management of the SGIC (Access to ASTUA)

Follow-up of the Title

- Self-reports UA
- External reports AVAP
- Other reports
- Improvement Plans
- Progress and Learning Outcomes

Information about the Centre	General information for students
• **Faculty of Sciencies** Campus de San Vicente del Raspeig Ctra. de Alicante s/n 03690 San Vicente del Raspeig (Alicante) Telephone:+ 34 96 590 3557 Fax:+ 34 96 590 3781 facu.ciencies@ua.es http://ciencias.ua.es/en/ • **Life Long Learning Centre (ContinUA)** **Only for pre-enrolment formalities** Germán Bernácer Building. Ground Floor Telephone: + 34 96 590 9422 Fax: + 34 96 590 9442 continua@ua.es https://web.ua.es/en/continua/	• Grants and assistance • Accommodation • Student refectories and cafeterias • Transport • Emergency medical care • Insurance • Services for students with special needs • Student representation and participation • University student identity card (TIU) • Frequently asked questions
UA: General Regulations	**+ Information about qualifications**
• Academic regulations and procedures of the University of Alicante	• Official State Gazette (BOE) on publication of course programmes • Own Web • Information pamphlet • Details title on the RUCT