

## universidade de aveiro Diploma Supplement

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free from any value judgements, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

### 1. information identifying the holder of the qualification

#### 1.1. family name(s):

LOBO PEREIRA DE CASTRO

#### 1.2. given name(s):

DANIEL JOSÉ

#### 1.3. date of birth (day-month-year):

06-05-1997

#### 1.4. student identification number or code:

79456

#### 1.5. identity card number:

15340436

### 2. information identifying the qualification

#### 2.1. name of qualification and title conferred (in original language):

LICENCIATURA EM BIOLOGIA (1º CICLO), LICENCIADO.

#### 2.2. Main field(s) of study for the qualification:

Biology.

#### 2.3. name (in original language) and status of awarding institution:

Universidade de Aveiro.

Public University - Public Foundation functioning under Private Law.

#### 2.4. name (in original language) and status of institution (if different from 2.3) administering studies:

Not applicable.

#### 2.5. language(s) of instruction/examination:

Portuguese.

### 3. information on the level of the qualification

#### 3.1. level of qualification:

University Higher Education - Level 6 (EQF).

#### 3.2. official Length of programme:

3 years full-time study.

#### 3.3. access requirement(s):

Entry to the study programme can be gained through the National Higher Education Entry Scheme as well as through the Special Access Competition, Special Entry Scheme and the Course Transfer and Change Schemes

To apply through the National Higher Education Entry Scheme, candidates must satisfy the minimum requirements mentioned in Section 8 (Higher Education Entry Requirements), which are generally: Secondary School Certificate and Entry Examinations (Mathematics or Physics and Chemistry or Biology and Geology).



#### **4. information on the contents and results gained**

##### **4.1. mode of study:**

Full-time.

##### **4.2. programme requirements:**

###### **objectives**

1st cycle undergraduate programmes should be characterised by a generalist approach and by the development of conceptual level competences, without neglecting the minimum level of competence that a Biologist needs. Thus, a 1st cycle in Biological Sciences should focus on current and innovative scientific endeavours in the areas of Natural History and Environmental Biology, Biochemistry, Cellular and Molecular Biology, Ecology and Biodiversity, Physiology and other Biology-oriented subject areas, whilst also including important classical concepts relating to biological and evolutionary mechanisms. These areas should be seen as knowledge fields that may underpin research in the areas of Ecology, Environmental Conservation and Management, Agriculture, Fishing, Pharmaceutical Sciences and Health and Life Sciences.

Additionally, it is also essential for a Biologist to acquire conceptual understandings and minimum competence levels in the area of Management / Entrepreneurship, given that the external forces acting on the labour market often mean that, in many areas of Biology, Biologists will need to create their own employment opportunities. The offer of a minor in Management is intended to cover this eventuality and is an innovative move in national terms.

The syllabus for the Degree in Biology includes an optional 4th year in which students may choose to take up a professional traineeship, in Portugal or abroad, in either a pure research or business environment.

To sum up, this degree programme incorporates curricular flexibility, whilst also providing the basic competences essential for a good Biologist. This allows UA Biology students to create their own profile in which they may choose to focus on Management and Entrepreneurship (minor in Management), or on the Geosciences educational component (minor in Geology), with a view to going on to a 2nd cycle programme in teacher training. Alternatively, they may elect to build an individualised profile in one of the Biology sub-areas (such as Marine Biology, Molecular Biology or Ecology) or strengthen and complement their skills in Physics, Mathematics, Chemistry or any of the other areas on offer from the University of Aveiro.

###### **Related Careers**

Careers in Biology or Biological Sciences may revolve around the following activities:

The study, identification and classification of living beings and their remains;

Ecological studies focusing on nature conservation, the biological aspects of the environment, of land-use planning and environmental impact;

The management and planning of the rational development of living resources;

The study, biological analysis and treatment of industrial, urban or agricultural pollution;

The study, biological analysis and control of water, soil and food quality;

The organisation, management and conservation of protected areas, nature parks and reserves, botanical and zoological gardens and museums focusing on Biology or related areas;

The study and analysis of biological samples and materials;

The study, identification and control of pathogenic biological agents, parasites and pests;

The study, control and development of biological techniques and processes with industrial applications, particularly in the area of food industry biochemistry;

The study, identification, production and control of biological products and materials and biological agents that affect the conservation and quality of any material or product;

The study of human, animal, vegetable and microbial genetics;

The study and application of processes and techniques in the area of human biology, particularly as regards clinical analyses, biomedicines and pharmaceuticals;

The teaching of Biology, environmental education and health education at all levels;

Pure or applied scientific research in any area of Biology;

Consultancy, expertise, technical and scientific management and advisory roles in all matters and activities relating to Biology.

Before the introduction of the Bologna process, all graduates in Biology, with 4 or 4+1 years of study, were permitted to carry out technical, consultancy, research and teaching activities in all the areas of Biology mentioned above. In accordance with the regulations of the Society of Biologists, any Biologist with a postgraduate degree in Biology, and



a combination of study and professional experience with a total duration of not less than 6 years, is eligible to become a full member of the Society. Thus, and with the implementation of the Bologna process, it is to be expected that a graduate in Biology would opt to follow a 1st cycle in Biology (3 years or 3 years + one year of professional work experience) with a 2nd cycle (2 years) leading to a Masters degree.

**4.3. programme details (e.g. modules or course units), and individual grades/marks/credits obtained:**

The detailed list of course units taken can be found enclosed (see Appendix I).

Scientific Areas:	
Compulsory	
B	- Biology
BQ	- Biochemistry
F	- Physics
M	- Mathematics
Q	- Chemistry
Optional	
B	- Biology
BQ	- Biochemistry

**4.4. grading scheme and, if available, grade distribution guidance:**

For each course unit the minimum classification required to pass is 10, on a 0-20 scale.

Calculation formula for overall grade: weighted arithmetic average, by the respective weight in credits of the classifications obtained by the student in each one of the curricular units of the corresponding study programme. The result of this operation is expressed as a unit by means of rounding the result to the unit immediately above or below, depending on whether the excess is greater than/equal to or less than five decimal places.

**4.5. overall classification of the qualification:**

**13 (Thirteen)**

Concluded in the academic year 2018/2019, on 03-09-2019.

Considering the Last four years, the ECTS grade of the student is: D \*.

(\*) A - Best 10%; B - Best 35%; C - Best 65%; D - Best 90%; E - Best 90% <-> 100%



## **5. information on the function of the qualification**

### **5.1. access to further study:**

This qualification meets the requirements for applications to the degree of Mestre in accordance with section 8.

### **5.2. professional status:**

Not applicable.

## **6. additional information**

### **6.1. additional information:**

Additional Information about the course unit:

Internship - "Estudo de biodiversidade vegetal da Barrinha de Esmoriz/Lagoa de Paramos."

Applied Research - "Ecologia e diversidade vegetal do Sítio da Barrinha de Esmoriz/Lagoa de Paramos

Um contributo para o conhecimento científico do local"

### **6.2. further information sources:**

<http://www.ua.pt/guiaonline/PageCourse.aspx?id=14&b=1&lg=en>.

## **7. certification of the supplement**

**7.1. date:** 14 January 2020

**7.2. signature:**



Prof. Doutor Paulo Jorge dos Santos Gonçalves Ferreira

**7.3. capacity:**

Rector of Universidade de Aveiro.

**7.4. official stamp or seal:**

All pages of this document are officially stamped.

## **8. information on the national higher education system**

The description of Portuguese Higher education system, officially provided by DGES (Directorate-General for Higher Education), can be found enclosed (see appendix II).



## APPENDIX I

### Detailed list of the course units

#### programme details:

Course units	Y	Ac. Year	Date	Grade	ECTS Gr.	ECTS	obs
40307 - MICROBIOLOGY	1	2015/2016	27-01-2016	14	C	6,0	
40352 - CELL BIOLOGY	1	2016/2017	03-02-2017	10	D	6,0	
41784 - GENERAL PHYSICS	1	2016/2017	13-01-2017	11	C	6,0	
47034 - BIOLOGY, EVOLUTION AND DIVERSITY I	1	2015/2016	07-01-2016	15	B	6,0	
47050 - CYTOLOGY AND HISTOLOGY	1	2015/2016	14-01-2016	14	C	6,0	
40308 - GENETICS	1	2016/2017	14-06-2017	11	D	6,0	
42782 - BIOSTATISTICS	1	2016/2017	05-07-2017	10	D	6,0	
43501 - BIOORGANIC CHEMISTRY	1	2018/2019	03-09-2019	10	D	6,0	
47035 - BIOLOGY, EVOLUTION AND DIVERSITY II	1	2016/2017	26-06-2017	14	B	6,0	
47266 - THEMES AND LABORATORIES IN BIOLOGY	1	2015/2016	15-06-2016	14	B	6,0	
40395 - MOLECULAR BIOLOGY	2	2017/2018	11-01-2018	10	D	6,0	
42314 - PLANT BIOTECHNOLOGY (49967 - OPTION 1)	2	2017/2018	22-01-2018	12	D	6,0	
47040 - BIOCHEMISTRY AND METABOLISM	2	2016/2017	27-01-2017	10	D	6,0	
47084 - GENERAL ECOLOGY	2	2016/2017	10-01-2017	11	E	6,0	
47109 - GENERAL PHYSIOLOGY	2	2017/2018	06-02-2018	12	C	6,0	
47389 - BIOLOGICAL POLLUTION INDICATORS (49738 - FREE OPTION I)	2	2017/2018	12-01-2018	14	C	6,0	
40310 - PLANT PHYSIOLOGY (49722 - OPTION IN PHYSIOLOGY)	2	2017/2018	13-06-2018	17	B	6,0	
40369 - BIOCHEMISTRY AND METABOLISM II (49972 - OPTION IN BIOCHEMISTRY)	2	2017/2018	19-06-2018	13	D	6,0	
40394 - FIELD BIOLOGY	2	2017/2018	26-06-2018	11	D	6,0	
40959 - BIOLOGICAL RESEARCH IN LABORATORY OR FIELD (49723 - OPTION II)	2	2017/2018	11-07-2018	16	B	6,0	
40018 - INTERNSHIP	3	2018/2019	17-06-2019	14	E	42,0	
40988 - APPLIED RESEARCH	3	2018/2019	30-01-2019	16	D	12,0	
47028 - BIOINFORMATICS	3	2016/2017	23-06-2017	13	C	6,0	

Legend: Y - Curricular Year; ECTS Gr. - ECTS Grade

\* Course units taken under a mobility programme (see section 6.1)

\*\* The ECTS credit system was approved in 2000, therefore course units created before this date do not have ECTS Credits attributed.

\*\*\* The ECTS grading scale of course units approved under the terms of Decree-Law n.º 42/2005 of 22 February is applied only to course units organized under the ECTS credit system (European Credit Transfer System).

#### Extra-Programme Details:

Course units	Ac. Year	Date	Grade	ECTS Gr.	ECTS	obs
47165 - LIFE SCIENCE MATHEMATICS	2015/2016	13-01-2016	10	D	6,0	

Legend: Y - Curricular Year; ECTS Gr. - ECTS Grade

\* Course units taken under a mobility programme (see section 6.1)

\*\* The ECTS credit system was approved in 2000, therefore course units created before this date do not have ECTS Credits attributed.

\*\*\* The ECTS grading scale of course units approved under the terms of Decree-Law n.º 42/2005 of 22 February is applied only to course units organized under the ECTS credit system (European Credit Transfer System).





## APPENDIX II

### Information on the national higher education system

The Framework Law on the Education System (Law nr. 46/86, dated 14 October 1986, further amended by Laws nr. 115/97, dated 19 September and nr. 49/2005, dated 30 August) establishes the general legal framework of the Education System.

According to this Law, the educational system comprises three levels: basic, secondary and higher education.

Pre-school education is optional and is for children between the ages of three and the age of entering basic education.

Basic Education is universal, compulsory and free and comprises three cycles, the first cycle lasts for four years, the second lasts for two years and the third lasts for three years.

Secondary education is compulsory and it comprises a three year cycle (corresponding to 10th, 11th and 12th year of schooling).

#### Higher Education Structure

The first steps towards the legal reform of the system of higher education were made in 2005, with the introduction of the new credit system (ECTS) for the cycles of study, mobility mechanisms, diploma supplement, amongst others. Changes were also made to the Basic Law for the Education System in order to implement the Bologna Process.

The new structure divided into three cycles of studies was created in 2006 and it was completely implemented in Portugal in 2009/2010. Generic qualification descriptors were also defined for each of the cycles of studies, based on acquired competences, as well as the structure for the first and second cycles of study in terms of typical ECTS intervals.

Portuguese higher education includes university and polytechnic education. University education is offered by public and private university institutions while polytechnic education is offered by public and private non-university institutions. Private higher education institutions must be subject to the previous recognition of the Ministry of Education and Science. The higher education system comprises also a concordatory institution.

#### Licenciado degree

Both university and polytechnic institutions confer the degree of licenciado (bachelor). In polytechnic education, the cycle of studies that leads to the degree of licenciado has 180 credits and a normal length of six curricular semesters of students' work. In certain cases namely those covered by internal legislation or by European legislation, the cycle of studies can have up to 240 credits with a normal length of up to seven or eight curricular semesters of students' work.

In university education, the cycle of studies that leads to the degree of licenciado has from 180 to 240 credits and a normal length between six to eight curricular semesters of students' work.

In the first cycle of studies the degree of licenciado is conferred, by universities or polytechnics institutions, to those that, after concluding all the curricular units that integrate the study programme of the licenciatura course, have obtained the established number of credits.

#### Mestre degree

Both university and polytechnic institutions confer the degree of mestre (master). The cycle of studies that leads to the degree of mestre has from 90 to 120 credits and a normal length of between three to four curricular semesters of students' work or in exceptional circumstances, 60 credits and a duration of two semesters, resulting from a stable and consolidated practice in that specific field at international level.

In polytechnic education, the cycle of studies that leads to the mestre degree must ensure predominantly that the student acquires a professional specialization. In university education, the cycle of studies that leads to the mestre degree must ensure that the student acquires an academic specialization resorting to research, innovation or expansion of professional competences. In university education, the mestre degree may also be conferred after an integrated cycle of studies, with 300 to 360 credits and a normal length of 10 to 12 curricular semesters of students' work, in cases for which the access to the practice of a certain professional activity depends on that length of time established by legal EU standards or resulting from a stable practice consolidated in the European Union. In this cycle of studies the degree of licenciado is conferred to those who have obtained 180 credits corresponding to the first six semesters of work.

The degree of mestre is conferred to those that, after concluding all the curricular units that integrate the study programme of the mestrado course, have obtained the established number of credits, as well as successfully defended in public their dissertation, their project work or their traineeship report.

#### Doutor degree

The Doutor (doctor) degree is conferred by universities and university institutes. The degree of Doutor is conferred to those that, after concluding all the curricular units that integrate the study programme of the Doutoramento (doctorate) course, when applicable, and have successfully defended their thesis in the public act.

#### Access conditions

##### General regime to accede to higher education

National and foreign students wishing to apply through the general regime to the first cycle of studies, must fulfil the following conditions:

- Have successfully completed a secondary course or a national or foreign qualification legally equivalent;
- Have set for the entrance examinations required for the degree programme the student wishes to attend and get the minimal mark required (there are higher education institutions that accept foreign tests or exams);
- Have fulfilled the prerequisites for the higher education course the student wishes to attend, if required.

##### Special conditions

Besides the regime geral (general regime), there are special conditions for top level athletes, Portuguese citizens on an official mission abroad, national or foreign staff in diplomatic mission, permanent staff of the Portuguese Armed Forces and scholarship holders within the framework of cooperation agreements signed by Portugal.

##### Special Competitions

Besides the general regime and the special conditions there are also special competitions for applicants with certain specific qualifications thus allowing new publics to accede to higher education in a perspective of lifelong learning, namely:

- applicants over 23 years old who have passed a especial exam for assessing their capacity to accede to higher education;
- holders of a specialization technological course (non higher education post-secondary course).

Admission to higher education institutions is subject to numerus clausus

##### Admission to the second cycle of studies

Those who meet the following conditions may apply to the cycle of studies that leads to the mestre degree:

- Holders of the licenciado degree or legal equivalent;

- Holders of a foreign academic degree duly recognised as satisfying the objectives identical to the licenciado degree by the competent scientific body of the higher education institution where one wishes to be admitted;
- Holders of an academic, scientific or professional curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.

#### Admission to the third cycle of studies

Those who meet the following conditions may apply to the cycle of studies that leads to the doutor (doctor) degree:

- Holders of the mestre (master) degree or legal equivalent;
- Holders of a licenciado degree who have a particularly relevant academic or scientific curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.
- Holders of an academic, scientific or professional curriculum vitae that is recognized as attesting the capacity to carry out this cycle of studies by the statutorily competent scientific body of the higher education institution to which they wish to be admitted.

#### Classification System

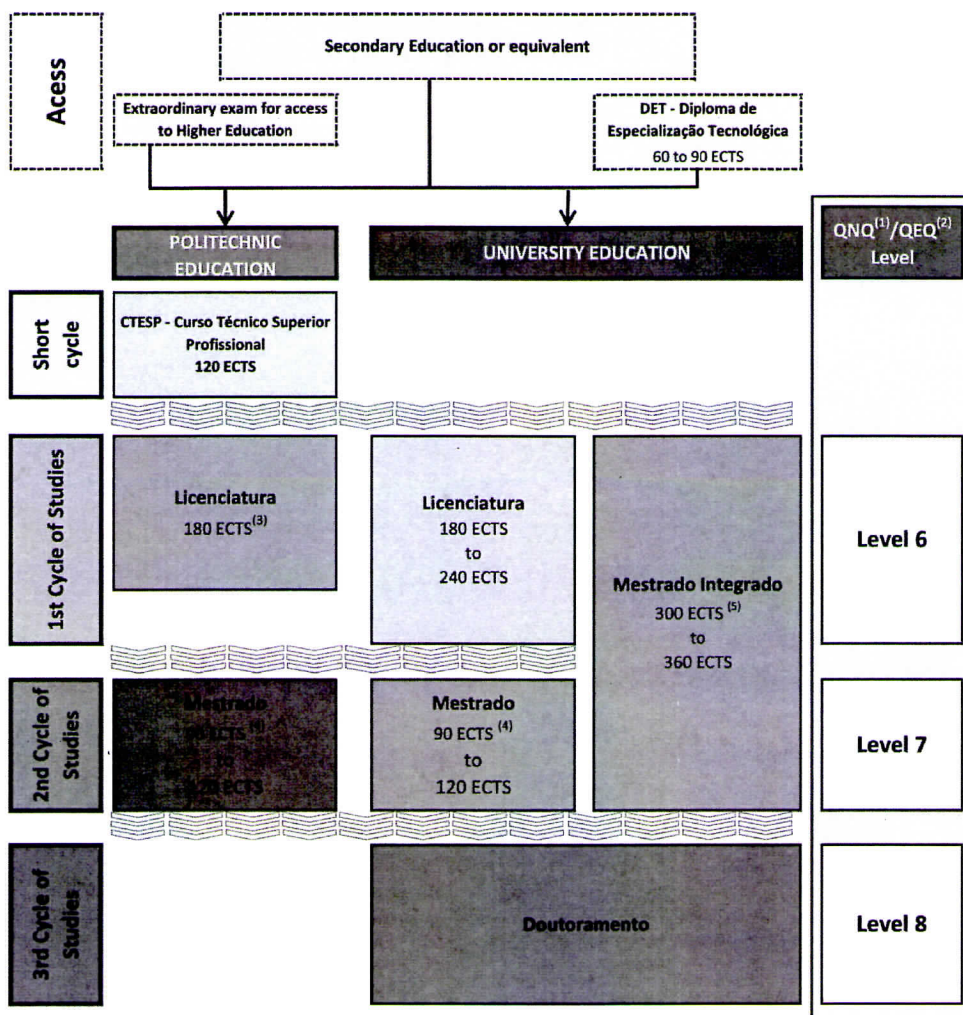
The degrees of licenciado and mestre shall have a final classification between 10 and 20 on a numerical scale of 0 to 20, as well as its equivalent in the European scale of comparability of classifications.

The academic degree of doutor is assigned a final classification pursuant to the regulating standards approved by the university that confers it.





## Portuguese Higher Education System



<sup>(1)</sup> QNQ - National Qualifications Framework.

<sup>(2)</sup> QEQ - European Qualifications Framework.

<sup>(3)</sup> Except when in order to exercise a certain professional activity requiring education and training ranging between 210 and 240 ECTS.

<sup>(4)</sup> In exceptional circumstances, a cycle of studies leading to a Mestre degree in a specialized field may have 60 credits, resulting from a stable and consolidated practice in that specific field at international level.

<sup>(5)</sup> A Mestre degree may also be awarded following an integrated cycle of studies, for access to a professional activity, if the length: a) is established by European Union regulations; b) results from a regular and consolidated practice within the European Union; in such cases, a Licenciado degree is awarded to students having obtained 180 ECTS (3 years, 6 semesters).