

# Biological Sciences

## Master Degree

### Second Cycle Degree

duration 2 years

ECTS credits 120

Campus Location Camerino

## web site

<https://biologicalsciences.unicam.it>

## School of Biosciences and Veterinary Medicine

## Director

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## Educational Manager

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## Delegates

## Educational Guidance

prof. Gabriella Gabrielli

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## Tutoring

prof. Consuelo Amantini

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## International Mobility

prof. Stefania Pucciarelli

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## Stage and Placement (Internship)

prof. Stefania Silvi

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## INTRODUCING THE MASTER

The second level degree in Biological Sciences (LM-6 class Biology) aims to train graduates with advanced knowledge and expertise in update biomolecular and biotechnological methodologies for application in diagnostic, nutritional, and environmental fields. Indeed, students can choice among parallel curricula:

- **Molecular Diagnostics and Biotechnology**
- **Nutrition: Functional and Sustainable Food**
- **Conservation Biology and Environmental Management.**

These curricula, in combination with core courses, give students flexibility to tailor their degree to their background, interests, and career goals. In order to support the mobility and the successful integration of students and graduates in an international context, these courses will be presented in English.

The characterization of the course is also enriched of a further curriculum, carried out in Italian and more specifically aimed at preparing for the profession of nutritional biologist, with a particular attention towards sports nutrition:

- **Nutrizione per il Benessere e lo Sport.**

## ADMITTANCE REQUIREMENTS

- Bachelor Degree that satisfies the requirements for access to University Master Degree courses
- List of subjects studied (transcript of records with grades obtained):
  - at least 15 ETCS in basic courses (Mathematics, Physics, Chemistry)
  - at least 60 ETCS in courses in biological areas
- Level of language proficiency (strongly recommended):  
ENGLISH level B2 (Independent User)

**Further information on admission rules, pre-admission deadline and other services at <http://international.unicam.it>**

## CAREER OPPORTUNITIES

The goal of the Master course in Biological Sciences is to prepare its graduates to start a career in different areas of Biological Sciences with particular regard to scientific research and diagnostics on biomedical, nutritional, and environmental fields. Graduates will be able to deal with the application of biology and biotechnology, at functional and molecular level, in industry, in service sector and in various areas of public administration. The degree in Biological Sciences, through the specific curricula, properly prepares professional figures, such as the nutritional biologist, who are allowed to formulate personal diets and oversee education programs and nutritional and environmental surveillance programs. All curricula will prepare students to engage in research, lead lab teams, make development and planning decisions, create and apply research modalities to large projects.

Graduates in Biological Sciences will be adequately prepared for access to third education level (PhD programs or specialization school) in molecular biology and biotechnology all over the world.



Classes will be held face to face in the University halls but it is possible to attend them also in streaming. Practical activities and laboratories will be organized in different modalities that will be communicated at the due time.

## COURSE STRUCTURE

There are two Semesters, from October to the end of January, and from March to mid-June.

The Winter Exam Session is in February.

The programme of study proposes different curricula focused to achieve a deeper education in specialized areas of Biology or Biotechnology.

<b>Molecular Diagnostics and Biotechnology</b>		<b>Nutrition: Functional and Sustainable Food</b>		<b>Conservation Biology and Environmental Management</b>		<b>Nutrizione per il Benessere e lo Sport</b>	
<b>I year</b>	<b>CFU</b>	<b>I year</b>	<b>CFU</b>	<b>I year</b>	<b>CFU</b>	<b>I year</b>	<b>CFU</b>
Genomics and Proteomics	12	Alternative Food & Nutrients		Community Ecology	8	Alimenti Funzionali	
High Performance		Sources	6	Applied Statistics	6	per il Benessere e lo Sport	12
Bio-Analytical Methods	6	Applied Nutrition	6	Biodiversity Assessment		Epigenetica & Nutrizione	6
Epigenetics	6	Food Quality	12	Monitoring Schemes	12	Fisiopatologia & Nutrizione	12
Biology of Cancer		Functional-Sustainable		High Performance		Metodi Bioanalitici	
and Biomolecular		Food Technologies	6	Bio-analytical Methods	6	per la Valutazione dello Stato	
Therapeutic Agents	6	Microbiota and Nutritional		Population Genetics		Nutrizionale/Metabolico	6
Clinical and Molecular		Conditions	6	and Animal Ecology	6	Nutrizione Applicata 1:	
Diagnostics	6	Epigenetics	6	Principles of Landscape Ecology	6	nutrizione per il benessere	6
Rotation Laboratory	6	Pathological Conditions		Rotation Laboratory	6	Nutrizione Applicata 2:	
Student choice	8	related to Nutritional Habits	6	Student Choice	10	nutrizione a supporto	
		Sustainable Food Systems	12			dell'attività sportiva	6
						Nutrizione di Precisione	
						per il Benessere e lo Sport	12
<b>II year</b>	<b>CFU</b>	<b>II year</b>	<b>CFU</b>	<b>II year</b>	<b>CFU</b>	<b>II year</b>	<b>CFU</b>
Stem Cell Technologies		Blood Parameters		Animal Adaptation		Basi Etnico-Culturali	
and Animal Models	12	and Nutritional Conditions	6	to Environmental Conditions	6	della Nutrizione	6
Molecular Parasitology	6	Endocrino-Metabolic Interplay	6	Ecosystem Services	6	Ecosistema Microbiota-Stato	
Molecular Ecology	6	Population Epidemiology		Plant Population Genetics		Nutrizionale Organismo	6
Molecular Archeological		through Genome Wide		and Ecology	7	Endocrinologia & Metabolismo	6
and Forensic Anthropology	6	Association Studies	8	Soil Microbiology		Parametri Biochimico-Clinici	
Microbial Pathogenesis		Internship	6	and Biodiversity	7	e Stato Nutrizionale	6
and Biofilms	6	Student choice	8	Experimental Thesis	30	Tirocinio	6
Experimental Thesis	30	Experimental Thesis	24	Final Dissertation	4	A scelta dello Studente	8
Final Dissertation	4	Final Dissertation	2			Tesi	20
						Dissertazione Tesi	2

## QUALITY ASSURANCE SYSTEM

UNICAM Quality Management System Certificate ISO 9001:2015 (from AFAQ-France, a French leader and one of the first certification bodies at the global level) guarantees students the quality of services provided.

The guarantee is via a rigorous analysis of internal organizational procedures and the prompt addressing of any weaknesses or shortcomings whether detected or reported by the students themselves.

The Quality Management System includes the following support services for students: orientation and guidance, mentoring, International mobility, Internships and communication.

These integrate with and support the educational activities, so as to contribute to the complete training of the student.

### Student Services

#### Guidance

Orientation to master's degrees

<https://www.unicam.it/futuro-studente/vuoi-iscriverti/orientamento>

#### Scholarships

- *WelcomeinUnicam*

scholarships for master's degrees

- *TalentinUnicam*

merit scholarships

<https://www.unicam.it/studente/servizi-studenti/borse-di-studio>

#### Internships and Placements

*Internships, Career service, Career day*

<https://www.unicam.it/impresa-e-territorio/stage-e-placement>

#### Welcome and International mobility

*welcoming international students, mobility programmes*

<https://international.unicam.it/>



### Information

#### Open

Monday-Wednesday-Friday

10.30-13.00

Tuesday-Thursday

15.00-17.00

#### Address

Polo degli Studenti - via Gentile III da Varano - 62032 Camerino

#### Contributions and registrations

Procedure available at <https://miiscrivo.unicam.it> from 1 July 2023.

Personalized fees on the basis of the ISEE-U.

Total or partial tuition fees exemptions.

#### More information

<https://www.unicam.it/didattica/guida-dello-studente>

<https://international.unicam.it/>

#### International students

Pre-enrolment procedures and requirements

[welcom@unicam.it](mailto:welcom@unicam.it)

#### Student Registry

[segreteriastudenti.scienze@unicam.it](mailto:segreteriastudenti.scienze@unicam.it)

#### Bachelor's Degree and Master's Degree Programmes

<https://www.unicam.it/offerta-formativa>

<https://www.unicam.it/offerta-formativa-en>

<https://www.unicam.it/>