



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2020/21
MASTER DEGREE
Biodiversity and Evolutionary Biology (Classe LM-6)
Enrolled from 2009/2010 academic year

HEADING

Degree classification - Denomination and code:	LM-6 Biology
Degree title:	Dottore Magistrale
Length of course:	2 years
Credits required for admission:	180
Total number of credits required to complete programme:	120
Years of course currently available:	1st , 2nd
Access procedures:	Open, subject to entry requirements
Course code:	F91

PERSONS/ROLES

Head of Study Programme

Prof. Mirko Baruscotti

Degree Course Coordinator

Prof. Claudio Bandi

Tutors - Faculty

Tutor per l'orientamento: Katia Petroni (orientamento in ingresso), Saverio Minucci (orientamento in uscita)

Tutor per la mobilità internazionale e l'Erasmus: Cristina Bonza

Tutor per i piani di studio: Claudio Bandi, Marco Caccianiga, Camilla Della Torre, Sara Epis

Tutor per stage e tirocini: Claudio Bandi, Sara Epis

Tutor per tesi di laurea: Claudio Bandi, Sara Epis

Tutor per trasferimenti: Claudio Bandi

Tutor per ammissioni lauree magistrali: Claudio Bandi, Andrea Binelli, Francesco Bonasoro, Marco Caccianiga, Sara Epis

Tutor per riconoscimento crediti: Claudio Bandi

Degree Course website

<http://bioevo.cdl.unimi.it/it>

Via Celoria, 18 - Milano Phone 0250325032 <https://www.unimi.it/it/node/360> <https://www.unimi.it/it/node/359>

Via Celoria, 26 - Milano (2° piano, torre A). A causa dell'emergenza sanitaria è momentaneamente attivo solo lo sportello telematico (via e-mail). Email: cl.biol@unimi.it

Via Celoria, 26 - Milano (2° piano, torre A). A causa dell'emergenza sanitaria è momentaneamente attivo solo lo sportello telematico (cl.biol@unimi.it).

<https://www.unimi.it/it/studiare/frequentare-un-corso-di-laurea/iscriversi/iscriversi-un-corso-magistrale>

Email

Email: bioevo@unimi.it

Representative for disability services and specific learning disabilities (appointed by the Academic Board):

Dr.ssa Diletta Dolfini Email: diletta.dolfini@unimi.it

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

The Master of Science (M.Sc.) programme in BIODIVERSITY AND EVOLUTIONARY BIOLOGY (BIOEVO, Class LM-6 Biology) is focused on the organismic biology and is addressed to acquire a comprehensive knowledge of the organisms in their integrity, complexity and evolutionary context.

The M.Sc. in BIOEVO proposes a revised version of both the format and contents of the M.Sc. in Biodiversity and Evolutionary Biology successfully activated in previous years, by introducing some variations that allow a better characterization of the specific formation in this field, a better definition of the professional profile and a deeper awareness of the real modern role of the biologist. In terms of formation, the objectives of this Master imply to deepen the basic

formation in biology and related applications with particular reference to the knowledge of the organisms at all the organization levels, including their ecological aspects. The central themes of biodiversity and evolution of animals and plants are presented with specific reference to structural and functional adaptations, reproductive and developmental processes, behaviour, interactions between organisms and environment and finally current problems of evolutionary biology. This M.Sc. programme explores a field of central interest in Biology, in which the Coordinating Board for teaching activities of the Milano University has full competence, both in terms of teaching tradition and established research expertise. Its objectives are addressed to offer an advanced preparation in the field of biodiversity and environment, and to develop specific capacities to apply the learning outcomes in biodiversity protection and conservation. In this view the central themes of this field are proposed in a format that integrates traditional and topical aspects according to an innovative approach to modern biology.

Professional profile and employment opportunities

The M.Sc. graduates in BIOEVO possess a specific and modern cultural preparation in the field of organism biology and a deep knowledge of the organism in its integrity, complexity and evolutionary context. The wide differential expertise acquired in biodiversity knowledge and conservation will provide a specific professional preparation in biology for a successful employment in industrial or public sectors whenever it is required: 1) deep understanding of biological phenomena at all levels and dissemination/divulgarization activities related to these competences; 2) deep knowledge of biodiversity; 3) identification and analysis of animal and plant communities and species, and activities addressed to their management and conservation; 4) conscious employment and sustainable development of biotic resources; 5) analysis and control of ecosystems, environmental impact evaluation.

After passing the exam for the profession, M.Sc. graduates in BIOEVO can enroll the Biologist's Professional Register, section A, with the title of Biologist, to perform the activities recognized by the Italian law.

Notes

To obtain the degree, students are required to demonstrate an English language proficiency at level B2 within the Common European Framework of Reference for Languages (CEFR). This level can be assessed in the following ways:

- by submitting the language certificate achieved no more than three years prior to the submission, at level B2 or higher, recognised by the University (the list of recognised language certificates can be found at <https://www.unimi.it/en/study/language-proficiency/placement-tests-entry-tests-and-english-courses>). The language certificate must be uploaded during the admission process;
- by taking the Placement Test, organised by SLAM exclusively during the first year, from October to January. Students who fail to reach level B2 will have to attend an English course organised by SLAM. The Placement Test is compulsory for all students who do not have a valid language certificate.

Students who do not take the Placement Test within the deadline and students who fail the SLAM end-of-course test within six attempts will have to obtain a language certificate within the year in which the language exam is scheduled.

Level of English assessed through a computer-based test during the bachelor's degrees obtained at the University of Milan: English levels B2 achieved no more than four years previously are deemed valid. The verification is automatic with no need to attach any certificate during the application phase.

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports international mobility by providing its students with the opportunity to spend study and internship periods abroad. It is a unique chance to enrich your educational path in a new exciting environment.

The agreements entered into by the University with over 300 universities from 30 different countries under the European Erasmus+ programme allow regularly enrolled students to carry out part of their studies at one of the partner universities or to undertake internships at companies, training and research centres and other organizations.

Similar international mobility opportunities are provided outside Europe, through agreements with a number of prestigious institutions.

Study and internships abroad

BIOEVO students are given the opportunity to spend part of their curriculum abroad, at a University within the European Union (EU) in the frame of the Erasmus+ program of the European Commission. BIOEVO students can attend courses and take exams that can be included in the core curriculum and/or perform the experimental thesis work in several European Universities localized in Norway, Netherlands – where courses taught in English are active - France, Poland, Spain and Portugal (see <http://eng.dbs.unimi.it/ecm/home/erasmus/outgoing-students/biological-sciences>). The admitted student will present a study plan including all the activities he/she intends to perform abroad, detailing the corresponding CFU: the number of proposed CFU should roughly correspond to those the student would achieve in the same time lapse remaining in his/her university. The study plan proposed by the student within the Erasmus+ program should be coherent with the BIOEVO Master course and must be evaluated and approved by the Teaching Board. The Teaching Board, if necessary, will require the student to integrate the program of exams taken abroad. At the end of the Erasmus + program, according to the rules established by the Academic Senate, the approved exams will be recorded, possibly with the original denomination, as part of the student's curriculum upon conversion of the European Credit Transfer and Accumulation System (ECTS) into CFU. If the student performs the experimental thesis work abroad, he/she must follow the rules outlined below (see

Caratteristiche tirocinio). The Erasmus and international mobility tutor for Biological Area is Dr. Cristina Bonza (cristina.bonza@unimi.it).

How to participate in Erasmus mobility programs

The students of the University of Milan can participate in mobility programmes, which last 3 to 12 months, through a public selection procedure.

Ad hoc commissions will evaluate:

- the candidate's proposed study programme abroad
- his/her foreign language proficiency
- the reasons behind his/her application

Call for applications and informative meetings

The public selection generally begins around February each year with the publication of a call for applications specifying the destinations, with the respective programme duration, requirements and online application deadline.

Every year, before the deadline for the call, the University organizes informative meetings to illustrate opportunities and rules for participation to students.

Erasmus+ scholarship

The European Union grants the winners of the Erasmus+ programme selection a scholarship to contribute to their mobility costs, which is supplemented by the University funding for disadvantaged students.

Language courses

Students who pass the selections for mobility programmes can benefit from intensive foreign language courses offered each year by the University.

Learn more at <https://www.unimi.it/en/international/study-abroad/studying-abroad-erasmus>

For assistance, please contact:

International Mobility Office

Via Santa Sofia 9 (second floor)

Tel. 02 503 13501-12589-13495-13502

E-mail: mobility.out@unimi.it

Desk opening hours: Monday to Friday 9 am - 12 noon

1st COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
DEONTOLOGY AND BIOETHICS	6	(3) MED/02, (3) IUS/14
English proficiency B2 (3 ECTS)	3	ND
Total compulsory credits		9
Elective courses		
BIODIVERSITY AND EVOLUTION	6	BIO/05, BIO/02
BIOGEOGRAPHY	6	BIO/05, BIO/02, BIO/03
BIOLOGY OF ANIMAL DEVELOPMENT	6	BIO/06
BIOMECHANICS	6	BIO/05
COMMUNITIES AND ECOSYSTEMS	6	BIO/07
ECOTOXICOLOGY	6	BIO/07
ETHOLOGY	6	BIO/05, BIO/07
MARINE BIOLOGY AND ECOLOGY	6	BIO/05, BIO/07
PHOTOBIOLOGY AND BIOENERGY	6	BIO/04
PLANT DEVELOPMENTAL BIOLOGY	6	BIO/01
PLANT EVOLUTION AND DOMESTICATION	6	BIO/02, BIO/03
POPULATION BIOLOGY AND GENETICS	6	BIO/07
REPRODUCTIVE STRATEGIES	6	BIO/06, BIO/05, BIO/01
SYMBIOSIS AND PARASITISM	6	BIO/05, BIO/02
HISTORY AND PHILOSOPHY OF SCIENCES	6	M-FIL/02, M-STO/05, FIS/08
HUMAN FUNCTIONAL BIOLOGY	6	BIO/17, BIO/16
MATHEMATICAL MODELING IN EVOLUTIONARY AND ENVIRONMENTAL BIOLOGY	6	INF/01, MAT/07
COMPLEMENTS OF ANIMAL BIOLOGY	6	BIO/05
COMPLEMENTS OF ECOLOGY	6	BIO/07
COMPLEMENTS OF MOLECULAR BIOLOGY	6	BIO/11
BIOMECHANICS	6	BIO/05
SYMBIOSIS AND PARASITISM	6	BIO/05, BIO/02
BIODIVERSITY AND EVOLUTION	6	BIO/05, BIO/02
BIOGEOGRAPHY	6	BIO/05, BIO/02, BIO/03
ETHOLOGY	6	BIO/05, BIO/07
PLANT EVOLUTION AND DOMESTICATION	6	BIO/02, BIO/03

End of course requirements

FINAL EXAM		45	NA
	Total compulsory credits	45	