



UNIVERSITA' DEGLI STUDI DI MILANO
PROGRAMME DESCRIPTION - ACADEMIC YEAR 2019/20
SINGLE-CYCLE DEGREE
Pharmacy (Classe LM-13)
enrolled from 2009/10 academic year

HEADING

Degree classification - Denomination and code:	LM-13 Pharmacy and industrial pharmacy
Degree title:	Dottore Magistrale
Length of course:	5 years
Total number of credits required to complete programme:	300
Years of course currently available:	1st , 2nd , 3rd , 4th , 5th
Access procedures:	Cap on student, student selection based on entrance test
Course code:	E24

PERSONS/ROLES

Head of Interdepartmental Study Programme

Prof. Marco Riva

Tutors - Faculty

Primo biennio

A-C Prof. Roberto Maggi

D-F Dr.ssa Silvia Araneo

G-L Prof.ssa Patrizia Limonta

M-R Prof. Alessandro Pedretti

S-Z Prof.ssa Roberta Moretti

Secondo triennio

A-D Prof. Alberico Luigi Catapano

E-H Dr.ssa Alessandra Colciago

I-M dott.ssa. Gabriella Roda

N-Q Dott.ssa Montagnani Marelli

R-Z Prof. Angelo Sala

Studenti stranieri

Prof.ssa Irma Colombo

Studenti Erasmus

Prof.ssa Alessandra Polissi

Studenti lavoratori, Studenti disabili e DSA

Tutti Prof. Ermanno Valoti

Tirocinio professionale in Farmacia

Coordinatore: Prof.ssa Paola Minghetti

Tutor accademici (suddivisione studenti in base a cognome):

Silvia Araneo (A, D)

Antonella Casiraghi (B)

Irma Colombo (C)

Roberto Maggi (F, L)

Marica Orioli (E, G, H, I)

Luca Palugan (J, K, L, N, V, Z)

Alessandro Pedretti (M)

Patrizia Restani (O, P, Q)

Marco Andrea Riva (R, T, U)

Ermanno Valoti (S, W, X, Y)

Degree Course website

www.farmacia.unimi.it

Via Trentacoste, 2 Milano Previo appuntamento telefonico o e-mail Email: irma.colombo@unimi.it

Via Balzaretti, 9 Milano Previo appuntamento telefonico o e-mail Email: m.riva@unimi.it

Via Mangiagalli, 25 Milano Previo appuntamento telefonico o e-mail Email: ermanno.valoti@unimi.it

<https://www.unimi.it/it/studiare/immatricolarsi-e-iscrivarsi>

Via Trentacoste, 2 Milano Previo appuntamento telefonico o e-mail Email: irma.colombo@unimi.it

CHARACTERISTICS OF DEGREE PROGRAMME

General and specific learning objectives

Inserire traduzione

Expected learning outcomes

Inserire traduzione

Professional profile and employment opportunities

Inserire traduzione

Notes

In order to get their degree, students are required to certify their knowledge of the English language at the B2 level. This level can be certified in one of the following ways:

- By submitting their language certificate, taken no more than 3 years before its submittal and attesting a B2 or higher level (for the list of the language certificates which are accepted by the University of Milan, please refer to the website: <http://www.unimi.it/studenti/100312.htm>). Students can submit their language certificate during the immatriculation procedure or send it to the Language Centre of the University of Milan (SLAM) via the Infostudente service.
- By sitting the placement test run by SLAM, during the first year exclusively, from September to December. Should they not pass the Placement Test, students will have to attend the English language course organized by SLAM. All students who do not have a valid language certificate must sit the Placement Test. Those students who do not sit the Placement test by December or do not pass the end of course test in one of the 6 attempts granted will have to get a language certificate outside the University of Milan within their degree.

EXPERIENCE OF STUDY ABROAD AS PART OF THE TRAINING PROGRAM

The University of Milan supports the international mobility of its students, offering them the opportunity to spend periods of study and training abroad, a unique opportunity to enrich their curriculum in an international context.

How to participate in Erasmus mobility programs

To gain access to mobility programs for study purposes, lasting 3-12 months, the enrolled students of the University of Milan must attend a public selection that starts usually around the month of February each year through the presentation of specific competition announcements, which contain information on available destinations, respective duration of the mobility, requirements and deadlines for submitting the online application.

The selection, aimed at evaluating the proposed study abroad program of the candidate, knowledge of a foreign language, especially when this is a preferential requirement, and the motivations behind the request, is performed by specially constituted commissions.

Each year, before the expiry of the competition announcements, the University organises information sessions for the specific study course or groups of study courses, in order to illustrate to students the opportunities and participation rules.

To finance stays abroad under the Erasmus + program, the European Union assigns to the selected students a scholarship that - while not covering the full cost of living abroad - is a useful contribution for additional costs as travel costs or greater cost of living in the country of destination.

The monthly amount of the communitarian scholarship is established annually at national level; additional contributions may be provided to students with disabilities.

In order to enable students in economic disadvantaged conditions to participate in Erasmus+ program, the University of Milan assigns further additional contributions; amount of this contributions and criteria for assigning them are established from year to year.

The University of Milan promotes the linguistic preparation of students selected for mobility programs, organising every

year intensive courses in the following languages: English, French, German and Spanish.

The University in order to facilitate the organisation of the stay abroad and to guide students in choosing their destination offers a specific support service.

More information in Italian are available on www.unimi.it > Studenti > Studiare all'estero > Erasmus+

For assistance please contact:

Ufficio Accordi e relazioni internazionali

via Festa del Perdono 7 (ground floor)

Tel. 02 503 13501-12589-13495-13502

Fax 02 503 13503

E-mail: mobility.out@unimi.it

Desk opening hour: Monday-friday 9 - 12

1st COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Analytical Chemistry	8	CHIM/01
Animal Biology	7	BIO/13
Calculus and Statistics	6	MAT/05
English proficiency B2 (2 ECTS)	2	L-LIN/12
General and Inorganic Chemistry and Stoichiometry	10	CHIM/03
Human Anatomy	9	BIO/16
Physics	6	FIS/01
Plant Biology and Pharmaceutical botany	8	BIO/15
	Total compulsory credits	56
2nd COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
APPLIED MICROBIOLOGY AND HYGIENE	10	BIO/19, MED/42
General Biochemistry	6	BIO/10
Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory	7	CHIM/08
Organic Chemistry	10	CHIM/06
PHARMACOGNOSY	10	BIO/14
Physiology	11	BIO/09
	Total compulsory credits	54
3rd COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Applied informatics	3	INF/01
General Pathology and Pathophysiology	11	MED/04
Medicinal Chemistry 1	10	CHIM/08
Metabolic and Functional Biochemistry	8	BIO/10
Nutrition Physiology and Pharmacology, and Dietetic products	10	(3) BIO/09, (4) CHIM/10, (3) BIO/14
PHARMACOLOGY AND PHARMACOTHERAPY	10	BIO/14
Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis	8	CHIM/08
	Total compulsory credits	60
4th COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector
Assays and methods of analysis of the Pharmacopoeias and lab of drug identification	12	CHIM/08
Chemotherapy and biological drugs	8	BIO/14
Medicinal Chemistry 2	10	CHIM/08
Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I	12	CHIM/09
Toxicology	10	BIO/14
	Total compulsory credits	52
Elective courses		
Drug development and scientific communication	8	BIO/14
Experimental laboratory	8	ND
Hormones/phytohormones and Metabolic diseases	8	(4) MED/13, (4) MED/05
Organic natural products: biosynthesis and characterization	8	CHIM/06
Pharmaceutical market and Regulatory aspects of health products	8	CHIM/09
PHYTOPHARMACY	8	BIO/14
5th COURSE YEAR Core/compulsory courses/activities common		
Learning activity	Ects	Sector

APPLIED PHARMACOLOGY	7	BIO/14
Pharmaceutical Technology and Legislation II and Lab of Pharmaceutical Technology II Medical Devices and Cosmetic prod	12	CHIM/09
Toxicological Chemistry and Laboratory of Chemical and Toxicological Analysis	6	CHIM/08
Total compulsory credits	25	
End of course requirements		
FINAL EXAM	15	NA
Professional training in pharmacy (first part)	10	NA
Professional training in pharmacy (second part)	20	ND
Total compulsory credits	45	

COURSE PROGRESSION REQUIREMENTS

The course contains the following obligatory or advised prerequisites

Learning activity	Prescribed foundation courses	O/S
APPLIED PHARMACOLOGY	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
PHARMACOLOGY AND PHARMACOTHERAPY	General Biochemistry	Core/compulsory
	Physiology	Core/compulsory
	PHARMACOGNOSY	Core/compulsory
Metabolic and Functional Biochemistry	General Biochemistry	Core/compulsory
	Organic Chemistry	Core/compulsory
General Biochemistry	General and Inorganic Chemistry and Stoichiometry	Core/compulsory
	Animal Biology	Core/compulsory
Medicinal Chemistry 2	Medicinal Chemistry 1	Core/compulsory
Medicinal Chemistry 1	Organic Chemistry	Core/compulsory
	Physiology	Core/compulsory
Organic Chemistry	General and Inorganic Chemistry and Stoichiometry	Core/compulsory
General Pathology and Pathophysiology	General Biochemistry	Core/compulsory
	Physiology	Core/compulsory
Nutrition Physiology and Pharmacology, and Dietetic products	General Biochemistry	Core/compulsory
	Physiology	Core/compulsory
	PHARMACOGNOSY	Core/compulsory
Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
	Medicinal Chemistry 1	Core/compulsory
	Physiology	Core/compulsory
Toxicological Chemistry and Laboratory of Chemical and Toxicological Analysis	Assays and methods of analysis of the Pharmacopoeias and lab of drug identification	Core/compulsory
Assays and methods of analysis of the Pharmacopoeias and lab of drug identification	Medicinal Chemistry 1	Core/compulsory
	Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis	Core/compulsory
Principles of quantitative pharmaceutical analysis and Laboratory for quantitative analysis	Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory	Core/compulsory
Inorganic Analysis of Substances having Pharmaceutical Interest and Qualitative Analysis Laboratory	General and Inorganic Chemistry and Stoichiometry	Core/compulsory
	Analytical Chemistry	Core/compulsory
Physiology	General and Inorganic Chemistry and Stoichiometry	Core/compulsory
	Animal Biology	Core/compulsory
	Physics	Core/compulsory
	Calculus and Statistics	Core/compulsory
	Human Anatomy	Core/compulsory
APPLIED MICROBIOLOGY AND HYGIENE	Animal Biology	Core/compulsory
	Human Anatomy	Core/compulsory
Hormones/phytohormones and Metabolic diseases	General Pathology and Pathophysiology	Core/compulsory
Drug development and scientific communication	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
PHYTOPHARMACY	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
Organic natural products: biosynthesis and characterization	Organic Chemistry	Core/compulsory
Pharmaceutical market and Regulatory aspects of health products	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
	Nutrition Physiology and Pharmacology, and Dietetic products	Core/compulsory
	Medicinal Chemistry 2	Core/compulsory
Pharmaceutical Technology and Legislation II and Lab of Pharmaceutical Technology II Medical Devices and Cosmetic prod	Pharmaceutical Technology and Legislation I and Laboratory of Pharmaceutical Technology I	Core/compulsory
	Chemotherapy and biological drugs	Core/compulsory
Toxicology	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
Chemotherapy and biological drugs	PHARMACOLOGY AND PHARMACOTHERAPY	Core/compulsory
	APPLIED MICROBIOLOGY AND HYGIENE	Core/compulsory
PHARMACOGNOSY	Animal Biology	Core/compulsory
	Plant Biology and Pharmaceutical botany	Core/compulsory

