UNIVERSITÀ DEGLI STUDI
DELL'INSUBRIA

**DIPARTIMENTO DI BIOTENOLOGIE
E SCIENZE DELLA VITA**

TEACHING REGULATIONS OF THE

MASTER'S DEGREE COURSE in BIOMEDICAL SCIENCES

a.y. 2023/2024

SECTION I - GENERAL INFORMATION	
NAME OF THE DEGREE COURSE (DC)	Biomedical Sciences
CLASS	LM-6
TYPE	2-year degree course
COURSE LOCATION	Busto Arsizio - VA
DEGREE COURSE (DC) WEBSITE	For information on the learning objectives of the DC, occupational opportunities, access requirements, admission procedures, expected educational results, curriculum / study plan, final exam, you may refer to the Annual Program Report (DC-APR), published on the course website: www.uninsubria.eu/master-bms
DEPARTMENT	Biotecnologie e scienze della vita - DBSV (Biotechnologies and Life Sciences - DBSV)
DEGREE COURSE COORDINATOR	Professor Tiziana Rubino
ACADEMIC OFFICE OF THE DEGREE COURSE	The academic office is located in via Dunant, 3 - Varese The academic office and the other offices of the University (Student Services office, Right to Study and Student Services, Orientation and Placement, Academic Offices and International Relations) may be contacted through the Infostudenti Service: www.uninsubria.it/infostudenti (in Italian) For questions on the degree course, students may also contact Servizio di Ascolto Manager Didattici per la Qualità - DBSV (in Italian)

LESSONS TIMETABLE	The course is organized following a semester-based calendar. Exams sessions are organized during the teaching activity~~ies~~ suspension periods; students may access the exams provided for in their study plan after having followed the course (attendance acquisition). **1st SEMESTER:** • Lecture~~s~~ start date: 25 September 2023 – ~~lessons~~ lecture end date: 19 January 2024; • Fall exam~~s~~ session: 13-17 November 2023 (except for 1st-year students); Winter exam~~s~~ session: 22 January 2024 - 23 February 2024. **2nd SEMESTER:** • Lecture~~s~~ start date: 26 February 2024 - ~~lessons~~ lecture end date 14 June 2024; • Spring exam~~s~~ session: 3-9 April 2024 • Summer exam~~s~~ session: 17 June 2024 - 20 September 2024 (except for August). For the lesson~~s~~ suspension dates and holidays for national, local and other festivities (Christmas break, Easter break, University holidays), students should refer to the **University's Academic Calendar** approved by the University bodies at the following link: www.uninsubria.it/infostudenti (in Italian)

FURTHER INFORMATION	COURSE ACCESS: open-access TEACHING LANGUAGE: English ORGANIZED IN TWO CURRICULA: Curriculum: *Basic and Applied Biomedical Sciences* Curriculum: *Double Degree* DOUBLE DEGREE: the Double Degree curriculum allows students to obtain a double title according to the provisions of the Agreement with the Master in Biomedical Sciences - University of Applied Sciences, Bonn-Rhein-Sieg.
ADMISSION PROCEDURES	Candidates need a diploma in the Bachelor's degree classes L-13 (Biological Sciences) or L-2 (Biotechnologies), or an equivalent first-level title obtained in Italy or abroad, according to current regulations. In this case, having obtained at least a total of 40 ECTS in the following academic field represents a curricular prerequisite to access the course: BIO/6 (Comparative Anatomy and Cytology), BIO/09 (Physiology), BIO/10 (Biochemistry), BIO/11 (Molecular Biology), BIO/12 (Clinical Biochemistry and Clinical Molecular Biology), BIO/13 (Applied Biology), BIO/14 (Pharmacology), BIO/16 (Human Anatomy), BIO/18 (Genetics), BIO/19 (Microbiology), MED/03 (Medical genetics), MED/04 (General Pathology), MED/06 (Medical Oncology), MED/07 (Microbiology and Clinical Microbiology). Candidates will need to have obtained the first-level title by 31 December 2023 in order to access the degree course. After the positive assessment of the curricular prerequisites, the candidates will have to take an individual background assessment interview with a specific committee, made up of the lecturers appointed by the Council of the Degree Course, on the topics related to the basic principles of physiology, pharmacology, molecular and cellular biology and biochemistry (for the list of the main topics of the interview please see the DC webpage). The interviews will take place in September 2023, following the calendar published on the DC webpage. A negative assessment in the interview entails the exclusion from the master's degree course for the current year. The candidates will also have to demonstrate an adequate knowledge of the English language, documented by: - an internationally recognized certification of at least a B2 level in the Common European Framework of Reference for Languages obtained in the previous three years ~~(in case of a certification obtained in the 5 previous years, to assess the knowledge of the English language, the interview will be carried out in English)~~; - or the attainment of an academic title (first-level degree, Master) for a course taught entirely in English. Students without the abovementioned documents will have to attend a specific English pre-course, which will be offered in September 2023, and pass the related exam. **Non-EU students: the course access procedure consists in two phases.** - All candidates will have to submit a pre-application to the foreign.students.bms@uninsubria.it email address (by 31 May 2023), which

	will have to include a certificate of the diploma with the indication of the exams they have taken, an English language certification, a photocopy of their passport and a motivation letter. Potentially suitable candidates on the basis of the submitted documents will be asked to participate in a videoconferencing interview, with the aim of ascertaining their preparation in the fields of physiology, pharmacology, molecular and cellular biology, and biochemistry. A negative assessment in the interview entails the exclusion from the master's degree course for the current year. - Only admissible candidates will have to pre-enroll on the Universitaly portal by the deadline published every year on the International students residing abroad | University of Insubria (uninsubria.it) website. The validation on the part of the University of the pre-enrollment carried out by students on the Universitaly portal will be automatically sent to the relevant diplomatic representatives, who will start the assessment procedures to issue the visa. At the same time, students should pre-register to the Course following the online procedure (Esse3) published on the University's website.
ORIENTATION, ENROLLMENT PROCEDURES AND OTHER ADMINISTRATIVE ASPECTS	**Incoming orientation:** The Degree Course organizes every year, in the spring/summer period, some course presentation and incoming orientation meetings for future freshmen. Informational material is published online and distributed to interested students. The admission procedures are published every year on the webpages of the Degree Course and of the students services office. Further information (for example on the curriculum, enrollment procedures) may be obtained through the Infostudenti service. **INFOSTUDENTI SERVICE** The INFOSTUDENTI service is a web application that offers a communication channel through which students and future students can obtain some useful information by contacting the different offices of the University (Student Services office, Right to Study and Student Services, Orientation and Placement, Academic Offices and International Relations). The service may be accessed by clicking on the following link: infostudenti (in Italian)

SECTION II - STUDY PLAN

MANDATORY TEACHING ACTIVITIES - 2022/2023 COHORT

Assessment method: M = exam with mark / Q = qualification / A = attendance

Basic and Applied Biomedical Sciences CURRICULUM

MANDATORY COURSES:

1st YEAR							
SEM.	**COURSE Title**	**MODULE Title**	**Academic field**	**DISCIPLINARY FIELD / Type of Teaching Activity**	**ECTS**	**HOURS**	**ASSESSMENT METHOD**
II	ADVANCED AND QUANTITATIVE GENETICS	ADVANCED AND QUANTITATIVE GENETICS - Module I: Human Genetics and Genomics	BIO/ 18	B (Biomolecular field disciplines)	6	48	M
II	ADVANCED AND QUANTITATIVE GENETICS	ADVANCED AND QUANTITATIVE GENETICS - Module II: Quantitative Genetics	BIO/ 18	C (Related or supplementary disciplines)	4	32	M
I	PHARMACOLOGY	PHARMACOLOGY - Module I - Pharmacology and Chemotherapy	BIO/ 14	B (Biomedical field disciplines)	6	48 (40+8 SEM)	M
II	PHARMACOLOGY	PHARMACOLOGY - Module II – Neuropsychopharmacology	BIO/ 14	B (Biomedical field disciplines)	6	50 (44+6 WRK)	M
I-II	ADVANCES IN BIOMEDICINE		BIO/ 13	B (Nutrition field and other applications disciplines)	10	82 (76+6 WRK)	M
I	EPIGENETIC CONTROL OF GENE EXPRESSION		BIO/ 11	B (Biomolecular field disciplines)	6	52 (40+12 WRK)	M
I	PATHOLOGY		MED /04	B (Biomedical field disciplines)	6	48	M

I	CELLULAR BIOCHEMISTRY AND PROTEOMICS		BIO/10	B (Biomolecular field disciplines)	6	56 (32+12 EXE+ 12 WRK)	M
II	ELECTIVE FROM THE PROPOSED LIST			B	6		M
II	ELECTIVE FROM THE PROPOSED LIST			C	6		M

SEM: seminars; WRK: workshop; EXE: exercitations

2nd YEAR							
SEM.	**COURSE Title**	**MODULE Title**	**Academic field**	**DISCIPLINARY FIELD / Type of Teaching Activity**	**ECTS**	**HOURS**	**ASSESSMENT METHOD**
I	IMMUNOPATHOLOGY		MED /04	B (Characterizing of the biomedical field)	6	48	M
ND	ELECTIVE (STUDENTS ARE ADVISED TO CONSULT THE PROPOSED COURSES LIST)				8		M
I	ELECTIVE 1 CURRICULAR (SEE PROPOSED COURSES LIST)			C	8		M
ND	CURRICULAR TRAINEESHIP		NN	F (Other)	30	750	A
A	JOB ORIENTATION		NN	F (Other)	1	8 SEM	A
ND	FINAL EXAM		NN	E	5	40	M

OPTIONAL COURSES

1st YEAR							
SEM.	**COURSE Title**	**MODULE Title**	**Academic field**	**DISCIPLINARY FIELD / Type of Teaching Activity**	**ECTS**	**HOURS**	**ASSESSMENT METHOD**
6 ECTS AMONG THE FOLLOWING COURSES:							
II	CLINICAL CHEMISTRY		BIO/12	B (Biomedical field disciplines)	6	48	M
II	NEUROANATOMY AND NEURODEVELOPMENT		BIO/16	B (Biomedical field disciplines)	6	48	M
II	NOVEL ANTICANCER THERAPIES		BIO/14	B (Biomedical field disciplines)	6	48	M
6 ECTS AMONG THE FOLLOWING COURSES:							
II	CELLULAR AND MOLECULAR ONCOLOGY		BIO/13	C (Related or supplementary)	6	48	M
II	CLINICAL MICROBIOLOGY AND VIROLOGY		MED/07	C (Related or supplementary)	6	48	M
II	PATHOPHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM		BIO/09	C (Related or supplementary)	6	48	M

OPTIONAL COURSES

2nd YEAR

THE FOLLOWING COURSES ARE OPTIONAL AND MAY BE CHOSEN ONLY ONCE FOLLOWING THIS PROCEDURE:

a. **8 ECTS for Type of Teaching Activity D (as an alternative, students can propose other courses which will have to be approved, see Study plan submission rules)**
b. **8 ECTS for Type of Teaching Activity C**

SEM.	COURSE Title	MODULE Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	ANIMAL MODELS AND TECHNIQUES IN BIOMEDICAL RESEARCH		BIO/05	C (Related or supplementary)	4	36 (24+12 WRK)	M
I	BIOETHICS		MED/43	C (Related or supplementary)	4	32	M
I	CLINICAL TRIALS IN PHARMACOLOGY		BIO/14	C (Related or supplementary)	4	32	M
I	NEUROBIOLOGY AND THERAPY OF ADDICTION		BIO/14	C (Related or supplementary)	4	32	M
I	PRINCIPLES OF NUTRACEUTICS AND CANCER CHEMOPREVENTION		BIO/13	C (Related or supplementary)	4	32	M
I	RNA-BASED EXPERIMENTAL APPROACHES		BIO/11	C (Related or supplementary)	4	40 (16+24 WRK)	M
I	SYSTEMS BIOLOGY		BIO/10	C (Related or supplementary)	4	36 (24+12 EXE)	M

The activation of Optional Courses of the second-year block will be established every year by the Council of the Degree Course.

Double Degree CURRICULUM

MANDATORY COURSES:

1st YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I-II	ADVANCES IN BIOMEDICINE		BIO/13	B (Nutrition field and other applications disciplines)	10	82 (76+6 WRK)	M
II	HUMAN GENETICS AND GENOMICS		BIO/18	B (Biomolecular field disciplines)	6	48	M

I	PHARMACOLOGY AND CHEMOTHERAPY		BIO/14	B (Biomedical field disciplines)	6	48	M
I	EPIGENETIC CONTROL OF GENE EXPRESSION - DDP		BIO/11	B (Biomolecular field disciplines)	7	64 (40+24 WRK)	M
I	PATHOLOGY		MED/04	B (Biomedical field disciplines)	6	48	M
I	CELLULAR BIOCHEMISTRY AND PROTEOMICS – Double degree		BIO/10	B (Biomolecular field disciplines)	7	68 (32+12 EXE+24 WRK)	M
II	CLINICAL CHEMISTRY		BIO/12	B (Biomedical field disciplines)	6	48	M
II	CLINICAL MICROBIOLOGY AND VIROLOGY		MED/07	C (Related or supplementary disciplines)	6	48	M
II	PATHOPHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM		BIO/09	C (Related or supplementary disciplines)	6	48	M

2nd YEAR							
SEM.	**COURSE Title**	**MODULES Title**	**Academic field**	**DISCIPLINARY FIELD / Type of Teaching Activity**	**ECTS**	**HOURS AT THE PARTNER UNIVERSITY**	**ASSESSMENT METHOD**
ND	ADVANCED CLINICAL IMMUNOLOGY I		MED /04	B (Biomedical field disciplines)	6		M
ND	CLINICAL APPLICATION	Module I: Monitoring Clinical Trials	BIO/ 14	B (Biomedical field disciplines)	8		M
ND	CLINICAL APPLICATION	Module II: Medical Proteomics	BIO/ 14	B (Biomedical field disciplines)	8		M

ND	ADVANCED CLINICAL IMMUNOLOGY II		MED /04	D (elective)	2		M
ND	SPECIAL FIELDS IN BIOLOGY		ND	D (elective)	6		M
ND	CURRICULAR TRAINEESHIP		ND	F (Other)	24		A
ND	FINAL EXAM		ND	E	6		

SECTION III - RULES FOR THE CURRICULUM

PREREQUISITES: NOT APPLICABLE

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

The courses have different types of assisted teaching: frontal lessons, exercitations and workshops.
Each ECTS corresponds to 8 hours of classroom teaching, 12 hours of laboratory and 12 hours of exercitations.

VALIDATION OF LINGUISTIC AND IT CERTIFICATIONS: NOT APPLICABLE

VALIDATION OF PROFESSIONAL ABILITIES OR EXAMS TAKEN IN A PREVIOUS CAREER.

Pursuant to article 5, paragraph 7 of the Ministerial Decree 270/04, the Council of the DC may validate:

- ✓ professional knowledge and skills certified pursuant to current regulations;
- ✓ knowledge and skills developed in educational activities at a post-secondary level in whose organization and implementation the university was involved.

The validation application will be assessed by the Council of the Degree Course. The validation may take place if the activity is related to the specific educational objectives of the Degree Course and of the educational activities for which the validation is being requested, also taking into consideration the content and duration in terms of hours of the activity. The maximum number of ECTS that may be validated is 12.

ATTENDANCE OBLIGATIONS

Attendance is mandatory for workshop courses only, for which students must attend at least 75% of the lessons, and for Job Orientation activities. Mandatory attendance courses must be taken in the correct year. Exceptions to the present norm may be allowed, specifically, in cases of course changes or transfers from another course.

CURRICULAR TRAINEESHIP

The educational curriculum is completed by a curricular traineeship of at least nine months for students of the Basic curriculum and of at least five months for students of the DD curriculum. The traineeship project will deal with topics related to the biomedical field and will be carried out at a University or external facility, even abroad, provided that it is affiliated with the University. The traineeship is a prerequisite for the preparation of the final thesis. The choice of the facility in which to carry out the traineeship and of the traineeship project must be submitted to the internship committee and will be assessed and approved by the Council of the Degree Course.

ENROLLING IN SUBSEQUENT YEARS (CAREER BLOCKS)

There are no career blocks to enroll in the second year of the Basic and Applied Biomedical Sciences Curriculum; for the double degree curriculum please see the specific paragraph.

TRANSFER PROCEDURES FROM OTHER DEGREE COURSES

Students from other Universities or from another Degree Course of the University of Insubria, or from previous systems, can apply for a transfer/change to the DEGREE COURSE. Transfer/change applications will be assessed by the Council of the Degree Course, which will proceed to the validation of the ECTS according to the following criteria:

- ✓ analysis of the curriculum
- ✓ assessment of the adequacy of the academic fields and of the contents of the activities undertaken by the student in their previous career, with regard to the specific educational objectives of the degree course and of the individual educational activities provided for in the curriculum.

The abovementioned validation is carried out as provided for in article no. 3, paragraphs 8 and 9 of the ministerial decree of Class redefinition (16 March 2007). The validation is carried out until the ECTS provided for by the curriculum are reached.

RULES FOR THE SUBMISSION OF STUDY PLANS AND INDIVIDUAL STUDY PLANS

Students will have to submit their Study Plan during the first year and choose the curriculum. It will be possible to modify the study plan in the following year, according to the administrative fulfillments calendar established by the University.
Information on how to submit and compile the Study Plan is available on the Students Services Office website: study plan submission.
Students who choose the Double Degree curriculum: first-year students are admitted to the curriculum with reservation, as described below. At the end of the first semester of the first year, students excluded from the Double Degree curriculum will have to submit a study plan change to the Students Services Office, indicating the curriculum variation, which will be effective immediately.
As explicitly provided for by Ministerial Decree 16.03.07, elective educational activities may be chosen among all the courses activated by the University. The Council of the Degree Course will assess the coherence of these elective activities with the student's educational curriculum.
The Degree Course offers a list of courses whose coherence has already been verified.

INTERNATIONAL CURRICULUM TO OBTAIN THE DOUBLE DEGREE ENROLLMENT PROCEDURES

For this curriculum there usually are 4 positions. The candidates (including non-EU candidates) will have to submit a specific application and hold an internationally recognized English language certification of at least a B2 level in the Common European Framework of Reference for Languages obtained in the previous 2 years. Italian students will need to have obtained a first-level diploma with a mark of at least 90/110 and foreign students will need a score of at least 2.5 in the "German grading system". The committee will formulate a judgment on the suitability of the candidates, but admission to the curriculum may only be confirmed at the end of the exam session between the first and second semesters, following a ranking list based on the number of taken exams (at least 19 ECTS) and on the marks obtained by the candidates. Please note that the Teaching Board of the MSc in Biomedical Sciences of the University of Applied Sciences, Bonn-Rhein-Sieg admits to second-year courses at their University only those students who have passed all first-year exams by the departure date. Should students admitted to the Double Degree curriculum not be able to complete all first-year courses before departure, they will be able to opt for the Basic and Applied Biomedical Sciences curriculum with an individualized study plan.
For further information, please refer to the Double Degrees page.

GRADUATION PROCEDURE

The final exam for the obtainment of the qualification and its assessment consists in the preparation and discussion of a thesis elaborated in an original manner by the student, under the supervision of a tutor, at the end of an internship period. The thesis will have to be written in English.

Students who follow the double degree curriculum will have to take a final exam also at the partner University, following the provisions of the related regulations.

The graduation sessions dates and relative deadlines are published on the website.

For further information please refer to the degree course webpage.
www.uninsubria.eu/master-bms
For students with disabilities and/or specific learning disorders, please visit:
www.uninsubria.it/studentidisabilidsa (in Italian)