



**UNIVERSITÀ DEGLI STUDI
DELL'INSUBRIA**

**DIPARTIMENTO DI BIOTECNOLOGIE
E SCIENZE DELLA VITA**

**TEACHING REGULATIONS OF THE COURSE
BACHELOR'S DEGREE COURSE in BIOLOGICAL
SCIENCES**

a.y. 2024-2025



SECTION I - GENERAL INFORMATION

NAME OF THE DEGREE COURSE (DC)	Biological Sciences
CLASS	L-13 - Biological Sciences
TYPE	3-year degree course
COURSE LOCATION	Varese
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 at: www.uninsubria.eu/bachelor-sbio
DEPARTMENT	Biotecnologie e scienze della vita - DBSV (Biotechnologies and Life Sciences - DBSV)
DEGREE COURSE COORDINATOR	Professor Rosalba Gornati
ACADEMIC OFFICE OF THE DEGREE COURSE	The academic office is located in via Dunant, 3 – Varese The academic office and the other office 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 teaching calendar. Exam sessions are organized in the teaching activities suspension periods. Students may access the exams provided for in their study plan after having attended the course (attendance acquisition). 1st SEMESTER: <ul style="list-style-type: none">• Lectures start date: from 30 September 2024 – lessons end date: 17 January 2025• Exams fall session: 11-15 November 2024 (except for 1st-year students);• Exams winter session: 20 January 2025 - 21 February 2025. 2nd SEMESTER: <ul style="list-style-type: none">• Lectures start date: 24 February 2025 – lessons end date 20 June 2025:• Exams spring session: 10-16 April 2025• Exams summer session: 23 June 2025 to 19 September 2025 (except for August) For the lessons 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 at the following link: www.uninsubria.it/chi-siamo/sedi-e-orari/calendario-didattico-di-ateneo (in Italian)



<p>FURTHER INFORMATION</p>	<p>COURSE ACCESS: Limited access course at the local level TEACHING LANGUAGE: Italian ORGANIZED IN TWO CURRICULA: - Biomedical - Cellular biology</p>
<p>ADMISSION, ASSESSMENT OF EDUCATIONAL BACKGROUND AND ADDITIONAL LEARNING REQUIREMENTS (OFA) REMEDIAL PROCEDURES</p>	<p>Access to the Degree Course is limited at the local level, with admission subject to availability for a total of 300 positions, including 5 reserved for non-EU citizens residing abroad, 2 of which are reserved for People's Republic of China citizens residing abroad who adhere to the Marco Polo and Turandot projects.</p> <p>The call for the admission procedure to the Degree Course is available on the University portal in the section dedicated to limited access courses.</p> <p>After having enrolled in the Degree Course students must take an educational background assessment test (mandatory test), following the calendar established by the Degree Course. Students who have not taken the test in any of the established dates will receive a career block and will therefore not be able to register for exams.</p> <p>ASSESSMENT OF THE STUDENTS' EDUCATIONAL BACKGROUND</p> <p>The assessment of the students' educational background focuses on basic Mathematical skills and entails a barrier level (10 correct answers for 20 questions). Students who do not obtain this level will be assigned an additional learning requirement (OFA) which entails passing a further assessment test without which students may not take the Mathematics exam. Students may attend a specific remedial teaching activity organized by the Degree Course during the IT Mathematics and Biostatistics course, at the end of which a further assessment test is organized to check that they have met the OFA.</p> <p>The OFA must be met by 30 September of the year following enrollment. Failure to meet the OFA by this date entails the impossibility to register for the exams of the second year.</p> <p>The test calendar, syllabus and further information are available on the University's webpage in the specific section dedicated to "Ammissione, Immatricolazioni e tasse" (Admission, enrollment, and fees): www.uninsubria.it/triennale-sbio#1 (in Italian)</p> <p>The assessment test is mandatory for everyone with the following exceptions: those who enroll in the first, second or third year by transferring from another university or degree course who have already passed a similar educational background assessment test through certification / self-certification which attests students have passed the Mathematics module, and/or who have already passed a Mathematics exam, do not have to take the test.</p> <p>The AiQUA Committee will decide upon the most suitable procedure to assess the educational background and the attribution of the OFA for those who could not take the test in the planned dates, even though they do not fall into the exonerated category.</p> <p>ADDITIONAL LEARNING REQUIREMENTS (OFA) REMEDIAL PROCEDURES</p> <p>Students who have not obtained the minimum score in the Basic mathematics module (10 correct answers for 20 questions), may attend lessons, but will have an additional learning requirement.</p>



	<p>The additional learning requirement (OFA) is met by passing a mathematics pre-exam which will represent an assessment of the contents offered by the remedial course offered by the Degree Course, as a measure to allow students to meet the OFA. Passing this exam is a necessary condition for admission to the IT Mathematics and Biostatistics exam.</p>
<p>ADDITIONAL PREPARATORY TEACHING ACTIVITIES FOR THE EDUCATIONAL BACKGROUND ASSESSMENT TEST</p>	<p>To prepare for the educational background assessment test, students may attend the Mathematics Pre-course offered by the University at the beginning of September. For further information, please visit the page dedicated to pre-courses: www.uninsubria.it/precorsi (in Italian)</p>
<p>ORIENTATION, ENROLLMENT PROCEDURES AND OTHER ADMINISTRATIVE ASPECTS</p>	<p>Incoming orientation:</p> <p>The Degree Course organizes for the 2nd semester of every year some presentation (Open Day) and incoming orientation meetings for future freshmen. Informational material is published and distributed to interested students. Admission procedures are published every year on the webpages of the Degree Course and of the students' services. www.uninsubria.it/orientamento (in Italian)</p> <p>In itinere orientation:</p> <ul style="list-style-type: none"> - Study plan <p>The tutors of the Degree Course organize orientation meetings on how to select the curriculum and elective courses (Type of Teaching Activity C and Type of Teaching Activity D).</p> <ul style="list-style-type: none"> - Internship <p>The Internships Committee organizes some meetings for 2nd- and 3rd-year students to provide useful information on internal and external internships</p> <p>Students and future students may find further information (for example on the pre-course, enrollment procedures) from the University's offices (Students Services Office, Right to Study and Students Services, Orientation and Placement, Academic Offices and International Relations) by sending an email through the Infostudenti service.</p> <p>INFOSTUDENTI SERVICE</p> <p>The INFOSTUDENTI service is a web application that offers a communication channel with the administration. The service may be accessed at: Infostudenti (in Italian)</p>

SECTION II - STUDY PLAN

MANDATORY TEACHING ACTIVITIES - 2024/2025 COHORT

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



BIOMEDICAL CURRICULUM

MANDATORY COURSES 1st YEAR

1st YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECT S	HOURS	ASSESSMENT METHOD
I	Plant biology		BIO/03	B	8	67 (58+9 WRK)	M
I	General and inorganic chemistry		CHIM/03	A	8	70 (52+18 EXE)	M
I	Cytology and Histology		BIO/06	A	9	76 (64+12 WRK)	M
A	Physics		FIS/07	A	9	80 (56+24 EXE)	M
A	IT Mathematics and Biostatistics		MAT/05 BIO/18	A/B	12	108 (72+36 EXE)	M
II	Animal biology		BIO/05	B	8	67 (58+9 WRK)	M
II	Organic Chemistry	Organic Chemistry Theory	CHIM/06	A	6	52 (40+12 EXE)	M
II	English		L-LIN/12	E	3	24	Q

BASIC COURSES 2nd YEAR

2nd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECT S	HOURS	ASSESSMENT METHOD
I	ORGANIC CHEMISTRY - Workshop		CHIM/06	A	2	18 (12+6 WRK)	M
I	Comparative Anatomy		BIO/06	B	6	48	M
I	Biochemistry		BIO/10	A	8	68 (56+12 EXE)	M
I	Genetics		BIO/18	A	8	64	M
I	Physiology		BIO/09	B	8	64	M
II	Molecular Biology		BIO/11	B	8	68 (56+12 WRK)	M
II	General Microbiology		BIO/19	B	8	68 (56+6 WRK+6 EXE)	M
ND	CURRICULAR COURSE FROM THE LIST			C	6		M



MANDATORY CURRICULAR COURSES

2nd YEAR							
SEM.	COURSE Title	MODULES Title	Academic Field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
II	Integrated Course in Physiopathology	Human physiology module	BIO/09	B	6	52 (40+12 EXE)	M

(*) M - EXAM Q - QUALIFICATION

MANDATORY COURSES 3rd YEAR

3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic Field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	Principles of General and Molecular Pharmacology		BIO/14	B	8	64	M
ND	Elective courses			D	12		M
ND	CURRICULAR COURSES FROM THE LIST			C	12		M
	Educational internship		FINEX	F	8		Q
	Further skills		NN	F	1	SEM 10	Q
II	Final exam		FINEX	E	4		

MANDATORY CURRICULAR COURSES

3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic Field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	Integrated Course in Physiopathology	Immunology and elements of pathology module	BIO/09	B	6	50 (44+8 WRK)	M
II	Cellular techniques		BIO/13	C	6	64 (16+48 WRK)	M



ELECTIVE CURRICULAR COURSES (one exam for the 2nd year and two exams for the 3rd year)

2nd and 3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic Field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	Human anatomy (2nd and 3rd YEAR)		BIO/16	C	6	48	M
I	Biochemical Methodologies (3rd YEAR)		BIO/10	C	6	54 (36+18 WRK)	M
I	Nutrition biology (3rd YEAR)		BIO/13	C	6	48	M
I	Economics for biology (2nd and 3rd YEAR)		SECS-P/06	C	6	48	M
I	Toxicology (3rd YEAR)		BIO/14	C	6	48	M

CELLULAR BIOLOGY CURRICULUM

MANDATORY COURSES 1st YEAR

1st YEAR							
SEM.	COURSE Title	MODULES Title	Academic Field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	Plant biology		BIO/03	B	8	67 (58+9 WRK)	M
I	General and inorganic chemistry		CHIM/03	A	8	70 (52+18 EXE)	M
I	Cytology and Histology		BIO/06	A	9	76 (64+12 WRK)	M
A	Physics		FIS/07	A	9	80 (56+24 EXE)	M
A	IT Mathematics and Biostatistics		MAT/05 BIO/18	A/B	12	108 (72+36 EXE)	M
II	Animal biology		BIO/05	B	8	67 (58+9 WRK)	M
II	Organic Chemistry	Organic Chemistry Theory	CHIM/06	A	6	52 (40+12 EXE)	M
II	English		L-LIN/12	E	3	24	Q

MANDATORY COURSES 2nd YEAR



2nd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	ORGANIC CHEMISTRY - Workshop		CHIM/06	A	2	18 (12+6 WRK)	M
I	Comparative Anatomy		BIO/06	B	6	48	M
I	Biochemistry		BIO/10	A	8	68 (56+12 EXE)	M
I	Genetics		BIO/18	A	8	64	M
I	Physiology		BIO/09	B	8	64	M
II	Molecular Biology		BIO/11	B	8	68 (56+12 EXE)	M
II	General Microbiology		BIO/19	B	8	68 (56+6 EXE +6 WRK)	M
ND	CURRICULAR COURSE FROM THE LIST			C	6		M

MANDATORY CURRICULAR COURSES

2nd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
II	Integrated course in Advanced biochemistry	Cellular biochemistry module	BIO/10	B	6	48	M

MANDATORY COURSES 3rd YEAR

3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
I	Principles of General and Molecular Pharmacology (§)(×)		BIO/14	B	8	64	M
	Elective courses#			D	12		M
ND	CURRICULAR COURSES FROM THE LIST			C	12		M
	Educational internship		FINEX	F	8		



	Further skills		NN	F	1	SEM 10	
II	Final exam		FINEX	E	4		

MANDATORY CURRICULAR COURSES

3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
II	Integrated course in Advanced biochemistry	Bio-IT module	BIO/10	B	6	52 (40+12 EXE)	M
II	Recombinant DNA Technologies		BIO/18	B	6	52 (40+12 WRK)	M

ELECTIVE CURRICULAR COURSES (one exam for the 2nd year and two exams for the 3rd year)

2nd and 3rd YEAR							
SEM.	COURSE Title	MODULES Title	Academic field	DISCIPLINARY FIELD / Type of Teaching Activity	ECTS	HOURS	ASSESSMENT METHOD
II	Applied plant biology (2nd YEAR)		BIO/04	C	6	52 (40+12 WRK)	M
I	Ecology (2nd and 3rd YEAR)		BIO/07	C	6	48	M
I	Economics for biology (2nd and 3rd YEAR)		SECS-P/06	C	6	48	M
I	Developmental biology (3rd YEAR)		BIO/05	C	6	48	M
I	Biodiversity and evolution (3rd YEAR)		BIO/05	C	6	48	M
II	Comparative physiology (3rd YEAR)		BIO/09	C	6	48	M

SECTION III - RULES FOR THE CURRICULUM

PREREQUISITES

There are no prerequisites for the individual courses; however, registration to 3rd-year exams is subject to having passed all 1st-year exams.



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

The courses have different types of assisted teaching: frontal lessons, exercitations and workshops, seminars.
Each ECTS corresponds to 8 class hours, 12 workshop hours or 12 exercitations hours, besides students' individual study time.

EXCELLENCE PROGRAM

The degree course offers outstanding students enrolled in their 2nd year an excellence program, that is, a cycle of seminars on topics related to the curriculum and identified every year by the Council of the Degree Course. The seminars cycle is offered between the 2nd and 3rd year. Attendance to the Program is considered as an honors element in the final exam.

VALIDATION OF LINGUISTIC AND IT CERTIFICATIONS

For the ENGLISH course, the validation of ECTS is automatic, by forwarding to the Student Services office the certificate attesting that one of the following tests, which may have been taken autonomously by the students, has been passed:

- ✓ University of Cambridge Examinations - IGCSE (PET, FCE, CAE, CPE, BEC 1-3, CELS) B1 level
- ✓ Trinity College London Examinations (ESOL Grade 5 -12, ISE level I – III)
- ✓ TOEFL Examinations (Paper Based Test Score > 457, Computer Based Test Score > 137)
- ✓ City & Guilds Pitman Qualifications (ESOL Intermediate – Advanced, SESOL Intermediate – Advanced)

The validation of other certificates will be assessed by the Council of the DEGREE COURSE, which will decide whether to validate the related ECTS.

Certificates' validity

For the purposes of validation, the certificates must have been obtained in the last 5 years, with the exception of the IGCSE, ESOL and TOEFL certificates which, instead, have a validity of only 2 years.

Certifications/certificates obtained from ONLINE course will NOT be taken into consideration.

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

Pursuant to article 4, paragraph 7 of the Ministerial Decree 1648/23, the Council of the Degree Course 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 (at least 75%). Mandatory attendance courses must be taken in the correct year. Exceptions to the present norm may be allowed, for example, in cases of transfers from another course or University.

ENROLLING IN SUBSEQUENT YEARS

There are no restrictions to enroll in the 2nd and 3rd year.

TRANSFER PROCEDURES FROM OTHER DEGREE COURSES

Students coming from another University or from another Degree Course of this University, can submit to the Students Services Office, together with the admission application, the application for the validation of the previous career, indicating the activities they request validation of. The validation application form will have to be supplied with the syllabi of the exams taken in the previous career: without these syllabi, the activities will not be validated. After enrollment, exams validation applications will not be taken into consideration.

The validation applications will be assessed by the Council of the Degree Course pursuant to article 3, paragraphs 8 and 9 of the ministerial decree of Class redefinition (16 March 2007). The validation of the European Credit Transfer and Accumulation System is carried out taking into consideration 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 students in their previous career, with regard to the specific educational objectives of the Degree Course.

Course transfers/changes are subject to availability and allowed to students who have taken an educational background assessment test, even if not organized by the CISIA, or entry test in the L13, L2, L32 Class, which attests



(with a certification or self-certification) that students have passed the mathematics module. Admission is allowed without an educational background assessment test, or an assessment test, also if students have passed a mathematics exam equivalent to that provided for in this Degree Course.

Admission to the 2nd year, within the limits of available positions: 21 validated ECTS required.

Admission to the 3rd year, within the limits of available positions: 60 validated ECTS required.

RULES FOR THE SUBMISSION OF STUDY PLANS AND INDIVIDUAL STUDY PLANS

Students will have to submit their Study Plan during the second year, with the possibility of modifying it in the following year, only for elective courses (Type of Teaching Activity D), following the University's administrative fulfillments calendar. Information on how to submit and fill in the study plan are available on the Students Services Office webpage (www.uninsubria.it/servizi/presentazione-piano-di-studio; in Italian). Elective educational activities may be selected from all the courses activated by the University, with the exception of limited number integrated courses offered by the degree courses of the healthcare area. To check choice constraints, please refer to the reference Students Services Office. The Council of the Degree Course will assess the coherence of these activities with the educational curriculum students have enrolled in.

Study Plans that conform to the regulations will be automatically approved, following the procedure provided by the Students Services for the submission of study plans. Students can submit an individual study plan, provided that this is coherent with the cultural project and suitable for the educational objectives and specific contents of the Degree Course. Individual study plans, which will have to abide by the minimum ECTS established by the Curriculum, will be approved by the Committee appointed by the Council of the Degree Course.

For further information please refer to the degree course webpage

www.uninsubria.eu/bachelor-sbio

For students with disabilities and/or specific learning disorders, please visit:

www.uninsubria.it/studentidisabilidsa (in Italian)