

Master's degree programme in

MOLECULAR AND MEDICAL BIOTECHNOLOGY LM-9

LM-9 <u>CLASS OF MASTER'S DEGREES IN MEDICAL</u>, <u>VETERINARY</u>, <u>AND PHARMACEUTICAL</u>
<u>BIOTECHNOLOGY</u>

DEGREE PROGRAMME DESCRIPTION AND REGULATIONS

(ANNUAL FACT SHEET - SUA-CdS, B1 section)

A. Y. 2024/25

YEAR OF ENROLMENT: 2024/25

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1. DEGREE PROGRAMME WEB PAGE

The <u>web pages</u> of the study program provide an overview of the course organization, regulations governing functional aspects, and other university regulations useful to the student community. They describe the quality assurance system and

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| 2. | PROGRAMME DIRECTOR | orientation services for future students. Information on the practical organization of the course, the conduct of teaching activities, training opportunities, and useful contacts throughout the study path up to graduation can be found. Procedures and modalities for enrolling in the course, entry requirements, and support services for students, including international ones, are also available. Additionally, contact information, FAQs, notices, services, and opportunities offered by the University are provided. Prof. Alejandro Giorgetti The Programme Director chairs the Quality Assurance Group, which is in charge of the design and self-evaluation of the degree programme according to the guidelines provided by |
| | | the Quality Assurance Board. Prof. Alejandro Giorgetti |
| 3. | PRESIDENT OF THE TEACHING COMMITTEE | The Teaching Committee is responsible for planning, organising, coordinating, checking and ensuring the quality of teaching; it is up to the Teaching Committee to propose changes to the degree programme regulations and rules and decide on any relevant students' requests. |
| 4. | ADMINISTRATIVE UNIT | Science and Engineering Teaching and Student Services Unit |
| 5. | TEACHING STAFF, MODULES AND OFFICE HOUR | Lecturers will normally publish information about their teaching and research activities on their individual web pages, which you can access from the home page of the degree programme web page. From the home page you will also be able to access and explore the module web pages, where you will find an overview of the contents of each module. For office hours details and information, please check the individual web page of the relevant lecturer. |
| 6. | DURATION | 2 years |
| 7. | LOCATION | Strada Le Grazie 15, 37134 Verona |
| 8. | DEPARTMENT/SCHOOL | Biotech |
| 9. | CURRICULUM | Unique curriculum |
| 10. | LANGUAGE | English |
| 11. | TEACHING MODE | In-Person lectures |
| 12. | TEACHING MODULES | The student is entitled to use any teaching materials provided for the course. If the instructor has activated the Moodle elearning platform, the materials contained therein remain available to students for a number of years equal to, at most, the normal duration of the study program. If the instructor has provided video recordings of the lessons, the videos remain available to students on the Panopto platform for the current and previous academic year. |
| 13. | ADMISSION | No admission Test required |
| 14. | REQUIRED ENTRY QUALIFICATIONS | Laurea (three-year Bachelor's degree), or other qualification gained abroad and recognised as suitable. |
| 15. | SUBJECT REQUIREMENTS AND PERSONAL PREPARATION | For further information, please see the relevant web page. |
| 16. | ENROLMENT | For information about how to apply, please see the relevant web page |
| 17. | CFU CREDITS | Each CFU typically corresponds to 25 hours of total student commitment. The different types of educational activities have the following CFU/HOURS ratios: - Lecture: 8 hours per CFU |

| - Exercise-laboratory: 12 hours per CFU |
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| - Internship/professional training: 25 hours per CFU |

| | MODULES | | |
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| The Study Plan includes the modules and other educational activities to be attended in the two-year degree programme. For further information, please see the degree programme web page. | | | |
| 19. | 19. MODULES PER ACADEMIC YEAR A list of the modules available in the relevant academic year, listed by academic year and year of enrolment, can be found here. | | |

| | PROGRAMME REGULATIONS | | |
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| 20. | ASSESSMENT METHODS | For each module/activity, the learning objectives, a programme description, textbooks, teaching material required and relevant assessment methods are determined. This information is available on each degree programme's website (please see the modules web pages). | |
| 21. | PRIORITY MODULES | There are no requirements for enrolment in subsequent years ('sbarramento' in Italian). | |
| 22. | REQUIREMENTS FOR ENROLMENT IN SUBSEQUENTUENT YEARS | The program does not include specific curricula. | |
| 23. | ELECTIVE MODULES AND ACTIVITIES (TYPE D) | 12 CFU are allocated to student-selected activities. These activities include courses offered at the University of Verona, as well as internship/professional training periods. The recognition of these CFU will be assessed by the Academic Committee based on the relevance of the chosen activities to the educational program. The Teaching Committee initiates specific actions to enhance the internationalization levels of the educational programs, including the structured inclusion of study abroad periods in the study plans and the encouragement of conducting educational activities in English. Activities within the TAF D framework | |
| 24. | ADDITIONAL TRAINING ACTIVITIES (F), INTERNSHIPS, WORK PLACEMENT, ETC | Internships and professional training activities are initially agreed upon and subsequently certified by the responsible teacher or tutor, along with the evaluation of the set educational objectives and the acquisition of the corresponding credits. The Didactic Board encourages the offering of internships and training opportunities to expand the educational offering and bring students closer to the professional world. These activities can be carried out in the context of laboratory or seminar courses under the direct responsibility of a single teacher or at companies accredited by the University of Verona, as well as in public or private research laboratories. The recognition of credits acquired through internships follows the General Academic Teaching Regulations. Activities within the TAF F framework | |
| 25. | TRANSVERSAL/SOFT SKILLS | Servizio Stage e Tirocini The Teaching and Learning Center at the University of Verona offers courses aimed at acquiring transversal/soft skills, which can be useful in many contexts: from the personal and working sphere to civic engagement. For information about how to apply, see the relevant web page. | |

| | | Participation in such activities can be recognized within the |
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| 26. | HOW TO SUBMIT YOUR INDIVIDUAL STUDY PLAN | TAF D. The Teaching and Learning Center at the University of Verona offers courses aimed at acquiring transversal/soft skills, which can be useful in many contexts: from the personal and working sphere to civic engagement. For information about how to apply, see the relevant web page. |
| 27. | INDIVIDUAL STUDY PLAN | It is possible, upon request, to obtain the degree according to an individual study plan that includes training activities different from those provided in the academic regulations, as long as they are consistent with the educational framework of the study program for the academic year of enrollment. The application for an individual study plan is reviewed by the competent educational structure, which evaluates its coherence. |
| 28. | ATTENDANCE | Attendance at lectures is not generally mandatory; however, individual instructors are free to require a minimum number of attendance hours for eligibility to take the course's exam. In such cases, attendance monitoring for educational activities is conducted according to methods communicated to the students in advance. |
| 29. | TUTORING FOR STUDENTS | To guide and assist students throughout their educational journey, some faculty members are assigned tutoring responsibilities. Additionally, a Tutoring Service is established, carried out by senior students already enrolled at the University, who offer their university experience to support incoming freshmen and fellow students. Tutoring service |
| 30. | TRANSFER FROM ANOTHER DEGREE PROGRAMME/FROM ANOTHER UNIVERSITY | Transfer from another degree" refers to the change of study program within the University of Verona (internal transfer). The "transfer from another university" refers to the case where students move to the University of Verona from another university. For specific timing details, please refer to the Academic Calendar. The Student Procedures Committee is responsible for validating the credits earned, along with the respective grades, from other degree programs in Italy or abroad. For internal/external transfers, validation is contingent upon detailed documentation from the originating institution/course, certifying completed exams, grades, and credits earned. The Committee applies the following criteria for validation: - for activities with a specific scientific-disciplinary sector reference, credits will be validated on a case-by-case basis by evaluating the content of the educational activities and the achievement of the educational objectives of the study program. To compensate for any credit deficiencies, the Student Procedures Committee may identify the most appropriate supplementary activities necessary to achieve the required credits for the individual activity in relation to one or more active courses within the study program. - for activities without a specific scientific-disciplinary sector reference, the Student Procedures Committee will evaluate on a case-by-case basis the content of the educational activities and their coherence with the objectives of the study program, considering the amount of credits that can be validated within the framework of the educational activities provided in the study program, - in the case where a particular educational activity is the contribution of multiple activities with different grades, the final evaluation will be determined by the weighted average of the reported grades, rounded up to the nearest whole number |

| | | Following the evaluations mentioned above, the Student |
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| 31. | RECOGNITION OF PRIOR LEARNING | Procedures Committee will determine the year of enrollment. It is the evaluation of the previous academic path, for the purposes of a program change, transfer, or withdrawal from studies, through the partial or total recognition of previously acquired CFU (university credits), depending on the correspondence between the two academic paths. Recognition of prior learning |
| 32. | RECOGNITION FOR DUAL ENROLLMENT | Students enrolled simultaneously in two different study programs can request the recognition of credits acquired in the other study program they are enrolled in, up to a maximum of one-third of the total credits required by the study program for which recognition is requested. |
| 33. | EXAM ROUNDS | The number of exam sessions is three, with each session consisting of two exam dates, spaced at least two weeks apart. |
| 3 | FLEXIBLE STUDENT PATHWAYS | Career management takes into account the specific needs of certain categories of students. Disability, specific learning disorders (SLD), and special educational needs (BES): With particular attention to disability and specific learning disorders (SLD), the course of study and the dedicated structure pursue the university inclusion of students with disabilities and specific learning disorders. To this end, it promotes the removal of material and immaterial obstacles that prevent full inclusion and also promotes the adoption of shared accommodations for participation in lessons, exams, and other educational activities and, in general, for participation in university community life, in compliance with the applicable regulations and without prejudice to the teaching autonomy of the faculty. In particular, the course of study promotes accessibility to facilities and teaching materials and encourages the use of distance learning methods, both synchronous and asynchronous, to meet the specific needs of students with disabilities or specific learning disorders. Within the limits of the applicable regulations, it promotes the university inclusion of students with special educational needs. Part-time enrollment: The part-time regime exclusively regulates the duration of the university career and the related economic burdens, allowing the degree to be obtained without falling into the condition of being off course for twice the normal duration of the course itself. Enrollment in individual courses: It is possible to attend individual courses within the bachelor's and master's degree programs for one academic year and take the related exams, receiving regular certification, including the indication of the credits (CFUs) obtained. Student-athlete: Students with significant competitive sports merits can access the career of a student-athlete. Annually, a specific notice outlines the requirements for access and permanence of student-athletes in the dual career path, allowing them to successfully complete an academic |
| 35. | FINAL EXAMINATION | exam, which consists of preparing and discussing an individual thesis written by the student in English. The thesis should highlight the acquired experiences and experimental research work carried out on a specific topic in university research laboratories or qualified public or private biotechnological institutions. |

The thesis will be prepared by the student under the supervision of a faculty mentor. To be admitted to the <u>final exam</u>, the student must have completed all the credits in the educational activities specified by the study plan, except for those reserved for the final exam itself. The committee overseeing the final exam evaluates the entire study path, taking into account the coherence between educational objectives and professional goals, intellectual processing and communication skills, and the candidate's cultural maturity.

The final thesis will result from experimental work conducted on a specific topic for a period of no less than 7 months, under the guidance of a thesis advisor, possibly assisted by one or more co-advisors.

40 CFU credits are allocated to the final exam. The thesis can be defended in both English and Italian.

Each thesis can be carried out at the University of Verona or in collaboration with another institution. Each thesis is supervised by a Thesis Advisor, possibly assisted by one or more Coadvisors, and two Opponents together forming the Evaluation Committee.

The Evaluation Committee consists of one Thesis Advisor and two Opponents. Any faculty member affiliated with the Departments of the Science and Engineering Area or the School of Medicine and Surgery of the University can serve as a Thesis Advisor. Researchers working in non-university research institutions, research fellows, and doctoral students can serve as Co-advisors. Opponents must be faculty members belonging to the Science and Engineering Area or the School of Medicine and Surgery of the University. They are appointed by the Academic Committee at least 25 days before the degree award ceremony, once the student's eligibility to take the final exam has been verified.

The Evaluation Committee's meetings are not regulated by official summons and take place by agreement among the parties involved within 15 days before the degree award ceremony, during which only the degree awarding will take place. At the end of the presentation, the Evaluation Committee will draft a brief evaluation note with a summary score (ranging from 0 to 8). This note will be transferred to the Degree Course Office by the day before the degree award ceremony for the subsequent formulation of the final grade by the Degree Committee, which will proceed with the degree award.

Evaluation of Theses

Each presentation is allocated approximately 30 minutes plus discussion time.

The criteria upon which the Evaluation Committee is called to assess are as follows:

- Depth of the work conducted, in relation to the state of the art in the disciplinary fields relevant to Molecular and Medical Biotechnologies.
- Advancement of knowledge and/or technology contributed by the thesis.
- 3. Critical engagement demonstrated by the candidate.
- 4. Experimental effort demonstrated by the candidate.
- 5. Work autonomy demonstrated by the candidate.
- 6. Significance of the methodologies employed.

- 7. Precision in the structure and composition of the thesis.
- 8. Clarity of presentation.

I counter-relator are not required to assess criterion 5.

Degree Classification

The final grade for the Master's degree (expressed on a scale of 110) ranges from 66/110 to 110/110 and is formed by rounding to the nearest integer (e.g., 93.50 becomes 94, 86.49 becomes 86), based on the following components:

- 1) Weighted average of credits and scaled to 110 of the grades obtained in the exams;
- Evaluation of the Thesis and Graduation Interview according to the following criteria:
- a) A maximum of 11 points is allocated to the Thesis and Graduation Interview.Specifically, 8 points are assigned to the Evaluation Committee that assesses the Thesis and Graduation Interview based on coefficients ranging between 0 and 1 (fractional with one decimal place) for each of the 1-8 points listed above.
- b) 3 points are assigned by the Degree Committee, which evaluates the student's curriculum vitae. Points are awarded based on achievements such as honors in exams, participation in officially recognized internships, exceeding exam requirements, and completing the degree within the standard duration of studies. If a candidate scores fewer than 11 points for the thesis, an additional 2 points will be awarded if:
 (a) The student has earned at least 12 CFU credits through international mobility during their academic career.(b) The student completes the final degree within the standard duration of the study program.
- c) The final score is the sum of the points obtained from parts a) and b).

If the final score reaches 110/110, the Degree Committee may decide to award "cum laude" honors.

For a proposal of a degree with "cum laude" honors, the student must have:

- A minimum weighted average of 104/110 (without rounding) or
- A minimum weighted average of 102/110 (without rounding) and have earned at least 3 honors. According to current regulations, honors are awarded only if the decision is unanimous.

External Theses

An external thesis is conducted in collaboration with an entity other than the University of Verona. In this case, the graduating student must first agree on the thesis topic with a supervisor from the LM9 degree program. There must be at least one cosupervisor from the external entity, who will serve as an immediate reference for the student during the thesis work. The supervisor and co-supervisors must be specified in the thesis assignment application. The results contained in the thesis are the joint property of all the individuals and entities involved. In particular, the contents and results of the thesis are to be considered public.

36. ADDITIONAL INFORMATION

Course Organs

The organizational management of the Master's degree course is entrusted to the Teaching Board of the Master's Degree Course as provided by the University Statute, which forms the Teaching Commission within it. The Teaching Commission is responsible for evaluating various student practices. Additionally, the Teaching Board annually appoints the Course Coordinator and the Quality Assurance (QA) group, who are responsible for preparing the Annual Study Program Review (SUA-CdS), the Annual Monitoring Sheets, and the Cyclical Review.

Academic Calendar

The Master's Degree Course in Molecular and Medical Biotechnology is organized into two semesters of lectures, typically from October to January and March to June, in accordance with the general rules of the General Study Manifesto and the calendars of the Department of Biotechnology. There are three exam sessions, each with two exam dates spaced at least two weeks apart. The lecture schedule and the corresponding exam calendar are published at least 20 days before the start of each period.

Recognition of Foreign Qualifications and Study Periods Abroad

The Academic Committee is responsible for recognizing credits and qualifications obtained abroad by students, along with their respective scores. Following evaluations, the Academic Committee will determine the enrollment year. The recognition of credits obtained by students enrolled in the Master's Degree in Molecular and Medical Biotechnology during study periods abroad, within the framework of international programs endorsed by the University of Verona, is subject to evaluation by the Academic Committee in accordance with the "Regulation on the Recognition of Study Periods Abroad" of the Sciences and Engineering Area.