



UNIVERSITÀ DEGLI STUDI DI TORINO

MASTER DEGREE COURSE IN “BIOTECHNOLOGY FOR NEUROSCIENCE” CLASS: LM-9
(Medical, Veterinary and Pharmaceutical Biotechnologies)

DIDACTIC REGULATION

ARTICLE 1

Functions and structure of the degree program

1. The Master's Degree Course (MDC) in Biotechnology for Neuroscience, in the LM-9 class, is established at the University of Turin. The Master's Degree Course in Biotechnology for Neuroscience is organized according to the provisions of the class of Master's Degrees in Medical, Veterinary and Pharmaceutical Biotechnologies referred to in the D.M. March 16, 2007 (*G.U. n. 155 del 6-7-2007 Suppl. Ordinario n. 153/G.U. n. 157 del 9-7-2007 Suppl. Ordinario n. 155*).
2. The Master's Degree Course in Biotechnology for Neuroscience has the Department of Neuroscience 'Rita Levi Montalcini' as its department of reference and belongs to the School of Medicine
3. The competent teaching structure is the Council of the Master's Degree Course in Biotechnology for Neuroscience, hereinafter referred to as CMDC.
4. The present Regulations (drawn up in compliance with the standard scheme approved by the Academic Senate), in harmony with the University Didactic Regulations (RDA), the Department Teaching Regulations and the University Regulations on relations between Schools, Departments and Study Programs, the didactic organization of the Master's Degree Course for what is not defined by the aforementioned Regulations. The didactic organization of the Master's Degree course, with the specific training objectives and the general framework of the training activities, drawn up according to the ministerial database scheme, is shown in Annex 1, which forms an integral part of this regulation. The Council of the relevant Department reserves the right to regulate particular aspects of the educational organization through specific Regulations.
5. This regulation is annually adjusted to the public training offer and is consequently linked to the cohort referring to the academic year of first enrollment.
6. The headquarters and the logistical support structures for didactic and laboratory activities are usually those of the Department of Neuroscience 'Rita Levi Montalcini' and / or the School of Medicine, without prejudice to the possibility that some courses may be borrowed or taught in other courses of the University of Turin. Educational and internship activities may be carried out at other educational and scientific facilities of the University of Turin, as well as at external, public and private entities, as part of specific agreements and conventions.

ARTICLE 2

Specific training objectives, employment and professional opportunities

Graduates in the MDC in Biotechnology for Neuroscience will be able to perform functions of high responsibility in activities related to the application of Biotechnology to Medicine and Neuroscience. In particular, they can:



UNIVERSITÀ DEGLI STUDI DI TORINO

- carry out and coordinate research activities in the biomedical field, concerning the identification and testing of innovative drug molecules, advanced medicines based on molecular-genetic technologies and cell therapies;
- manage the acquisition and analysis of data resulting from the use of molecular, neurophysiological and neuropathological biomedical technologies;
- manage activities connected with the development and application of methods of investigation and diagnostics of the functions of the nervous system;
- cooperate in the production of the documentation required by regulatory authorities for the approval of diagnostic and therapeutic procedures and for the protection of intellectual property.
- prepare specialists in scientific communication or dissemination to the general public, concerning the results obtained by biotechnologies in general and specifically those deriving from the application of neurophysiology, neurogenetics, neuropharmacology, neuroengineering, as well as the effects of these technologies on health;
- carry out market surveys in the field of biotechnology, artificial intelligence, robotics, prosthetics and neuro-rehabilitation;
- carry out research activities in the field of neuroeconomics;
- produce institutional communications, including within international organizations.

To carry out the functions described above, Graduates in Biotechnology for Neuroscience will have advanced professional skills regarding the processes of research, development and production of goods and services, in the main sectors of modern bio-medical technologies. The more specific scope of these skills will concern cellular, molecular, genetic, pharmacological, physiological and computer technologies used for the study and diagnostics of the physiological and pathological conditions involving the structure and function of the nervous system, as well as for the therapy of his pathological affections. Graduates will also have the necessary skills for the promotion and development of scientific and technological innovation and for technology transfer. Finally, they will have the transversal communication, organizational and management skills necessary to operate, interact and update themselves in the multidisciplinary work contexts typical of neuroscientific applications.

Expected learning outcomes, expressed through the European qualification descriptors

Knowledge and understanding

At the end of the curricular path, graduates in Biotechnology for Neuroscience must have acquired theoretical and practical knowledge that will allow them to be an operator culturally prepared to face scientific, diagnostic, therapeutic, technological and economic problems in the field of human health, with particular regard to those connected with neuroscience.

In particular, the graduate must have developed a good knowledge and understanding of the following disciplinary contents:

- the main statistical and IT methodologies for the advanced quantitative analysis of large amounts of data, especially but not exclusively of the bioinformatics type;
- the genetic and molecular basis of the cellular, anatomical, physiological functions and development of organisms, with particular regard to their nervous system;
- the cellular and molecular methodologies underlying biotechnological diagnostics and systems biology;
- the cellular and molecular methodologies used for the engineering of cells, tissues and organisms;



UNIVERSITÀ DEGLI STUDI DI TORINO

- the anatomical-functional structure, connections and developmental modalities of the nervous system;
- the methodologies for the morphological and morpho-functional analysis of the nervous system;
- the molecular, cellular, biochemical, genetic and physiological basis of the normal and pathological functioning of the nervous system;
- the systemic neural physiology of perception, motor skills and cognitive processes;
- the neurobiological basis of autonomic functions and neuro-endocrine integration
- the technologies used to study the functioning of the nervous system in normal and pathological conditions;
- the bases of the physio-pathological processes that characterize the most relevant human pathologies, with particular regard to those that directly or indirectly affect the nervous system;
- the molecular and cellular basis of the action of drugs, both traditional and biotechnological;
- the pharmacological basis of the treatment of human pathologies, with particular regard to those affecting the nervous system;
- the main clinical manifestations of the pathologies of the nervous system;
- the main methodologies for the production and analysis of neuroimaging;
- the main methodologies for recording electrophysiological signals and for modulating electrophysiological and neuromuscular activity;
- the main contexts, materials and methods of interface between neural / neuromuscular systems and technological applications of the electronic, computer and robotic type;
- the principles of patenting and management of biotechnology companies;
- the main legal aspects of biotechnology and neurotechnology;

This knowledge and understanding will be achieved through lectures, interactive seminars, discussion of scientific articles, study of specific cases as well as practical activities carried out in particular during internships. Assessment didactic tools will be the evaluation, upon completion of the examination tests (oral and / or written), of individual and / or group papers and projects.

Applying knowledge and understanding

Graduates in Biotechnology for Neuroscience must have demonstrated their ability to apply knowledge and understanding of qualifying biotechnological and neuroscientific disciplinary contents by verifying their ability to:

- use the principles of the scientific method in relation to case studies concerning the solution of scientific problems and the production of goods and services in the field of biotechnology and neuroscience;
- perform quantitative and integrative analyzes of large amounts of heterogeneous data, using adequate statistical and IT methodologies, including programming tools and machine-learning methods;
- use the main cellular and molecular methods;
- combine knowledge of neurocytology, neuromorphology, neuroembriology, neurophysiology, neurochemistry, neuropharmacology, neuropsychology with methods and techniques of quantitative disciplines, such as mathematics, statistics, physics, chemistry or bioengineering;
- designing experimental protocols for the development of diagnostic, therapeutic and preventive medicine strategies based on biotechnology;
- operate in work contexts characterized by multidisciplinary work groups, interacting productively with professionals in the medical, engineering, physical and IT fields.



UNIVERSITÀ DEGLI STUDI DI TORINO

The verification of the ability to apply the knowledge acquired will be first of all carried out in relation to the individual courses, through exercises, group discussions, problem solving, the elaboration of individual or group teaching projects, such as writing research projects, and the evaluation of the exams. The experimental skills gradually acquired in the context of the internships will be subjected to continuous verification by the managers of the host laboratories, who at the end will have to formulate a detailed judgment on the technical skills developed.

Making judgements

Graduates in Biotechnology for Neuroscience of the University of Turin will have the ability to:

- work with a high degree of autonomy, assuming responsibility in the management of projects and resources;
- contribute in a relevant and innovative way to interdisciplinary research, development, diagnostics and therapy activities, in groups made up of personnel with different backgrounds and / or specific skills;
- formulate independent judgments on the interpretation and methodological correctness of experimental and clinical laboratory data;
- assess the safety conditions of laboratories in the biomedical, biotechnological and neuroscience fields;
- act with ethical correctness and awareness of ethical, legal and economic problems related to the application of biotechnological and neuroscientific methods;

To achieve these objectives, teaching will be divided into integrated courses that favor the comparison and integration of knowledge between different disciplines, belonging to the same disciplinary field or to different disciplinary fields. The autonomy of judgment will be a fundamental element of evaluation of the various ongoing examinations (written and / or oral), of the individual and / or group papers and projects and of the degree thesis.

Communication skills

Graduates in Biotechnology for Neuroscience of the University of Turin will have the ability to:

- communicate their scientific knowledge and the results of their research in an international context;
- communicate information, ideas, problems and solutions within the reference work environment;
- express their evaluations and propose innovative solutions to biotechnological and neuroscientific problems;
- convey basic, advanced, specialist and technological knowledge in the context of work, training and teaching contexts;
- disseminating current biotechnological and neuroscientific issues, including through modern information technologies, to an audience with different levels of competence;

These skills will be developed and tested during the courses by encouraging oral presentations and critical discussion of the topics. The ability to critically present the results, communicate and discuss them will be verified during the final exam. Particular importance will be given in the evaluation to the ability to use the English language for these purposes.

Learning skills

Graduates in Biotechnology for Neuroscience of the University of Turin will have the ability to:



UNIVERSITÀ DEGLI STUDI DI TORINO

- learn and deepen new knowledge by consulting bibliographic material, both in paper and electronic format;
- effectively consult bioinformatic databases and integrate the information contained therein to develop new knowledge;
- constantly update their skills on problems and methodologies and on biomedical, biotechnological and neuroscientific innovations, also through participation in seminars or thematic conferences;
- continue their studies in a second level doctorate or master or specialization schools in the biomedical, biotechnological and neuroscientific fields.

The ability to keep up-to-date will be stimulated within the integrated courses, during curricular internships and the preparation of the degree thesis. The ability to learn independently will be verified, in the various exams, as part of the seminar activity carried out during the delivery of the various courses and in the evaluation of the degree thesis.

Employment and professional opportunities for graduates

Graduates in Biotechnology for Neuroscience will be able to operate within the following work contexts, in Italy and abroad:

- biotechnological and pharmaceutical industries;
- industries specialized in the production of neurodiagnostic, neurorehabilitative or neuroprosthetic devices;
- companies or enterprises, public or private, operating in the design, testing and monitoring of human-machine interaction systems, computer-mediated communication and more generally in companies or businesses operating in sectors where knowledge on the functioning of the brain is essential ;
- companies and service or communication companies, including commercial ones, for consultancy activities in the field of neuroscience;
- research institutions (universities and other public and private institutes and bodies interested in research in the fields of biotechnology, biomedicine and neuroscience);
- national and private health system. In this regard, the Interministerial Decree of 28/06/2011 established the equivalence of the Master's Degrees of the LM-9 class of Medical, Veterinary and Pharmaceutical Biotechnologies to the Master's Degrees of the LM-6 Biology class for the purposes of participation in public competitions in the field medical-health.
- certification bodies and patent office;
- publishing and scientific communication company.

The Course prepares for the professions of:

- Biologists and related professions - (2.3.1.1.1)
- Biophysicists - (2.3.1.1.3)
- Biotechnologists - (2.3.1.1.4)
- Pharmacologists - (2.3.1.2.1)



UNIVERSITÀ DEGLI STUDI DI TORINO

Admission requirements and verification procedures

1. The Master's Degree Course in Biotechnology for Neuroscience has unscheduled access and will be delivered in English. Students who intend to enroll in the Master's Degree Course in Biotechnology for Neuroscience must be in possession of a three-year degree or university diploma or other qualification obtained abroad, recognized as suitable according to current legislation. In particular, the eligibility of qualifications for the sole purpose of enrollment in the master's degree course is approved by the Degree Course Council in compliance with international agreements and the assessment of curricular requirements. The possession of these requirements is documented by means of the Degree or Diploma certificate with exams that must be presented with the application for registration and verified by the relevant Commission. Students must also be in possession of the curricular requirements and adequate personal preparation referred to in paragraphs 2 and 3 below, as enrollment with educational deficiencies is not envisaged.

2. *Curricular requirements:* First level Degree Diploma of the L-2 Biotechnology class (DM 270/04) or of the Class 1-Biotechnology (DM 509/99) or, alternatively, a First Level Degree Diploma of other classes, or other qualification obtained abroad, recognized as suitable according to current legislation, provided that the student has achieved the following minimum curricular requirements, to be documented at the competent Teaching Secretariat:

1. MAT/01-MAT/09, FIS/01-FIS/08, INF/01, MED/01, SEC_S/01, SECSS_S/02: 10 ECTS
2. CHIM/01, CHIM/02, CHIM/03, CHIM/06: 10 ECTS
3. BIO/01, BIO/10, BIO/11, BIO/13, BIO/17, BIO/18, BIO/19: 10 ECTS
4. AGR/07, BIO/09, BIO/10, BIO/11, BIO/14, BIO/16, BIO/18, CHIM/06, CHIM/11, MED/04, MED/42: 24 ECTS.

The credits of a sector already counted in one field cannot be used for the same sector in another field. A tolerance of up to a maximum of 10%, or 5 ECTS, is allowed. This tolerance margin can be applied indifferently to only one of the SSD groups listed above or to several groups. Since the course will be delivered in English, it will be necessary to document an English proficiency corresponding to the B2 level of the Common European Framework of Reference for the knowledge of languages, or higher. Students who do not have a level of knowledge of the Italian language of level B2 or higher will have to adapt their language skills up to this level, using the ECTS specifically provided for in the table of training activities for pursuant to art. 10, paragraph 5, letter d).

3. *Verification of adequate personal preparation.* The adequacy of personal preparation will be verified by passing a written test that will evaluate the possession of strong notions of Chemistry, Biochemistry, Molecular and Cellular Biology, Genetics, Anatomy, Physiology / Pathophysiology on the basis of the Programs indicated on the Degree Course website. Graduates in class L-2 (Biotechnology DM 270) or class 1 (Degree class in Biotechnology DM 509) and L-13 (Biological Sciences) or class L2 (Degree in Biology class DM 509) and in the other degree courses in possession of the curricular requirements that have achieved a degree grade of at least 99/110 are not required to take the test. The latter will take place in classrooms open to the public, upon notice on the Master's Degree Course website, in the presence of the Examination Committee; it will not be allowed to take the test to verify the adequacy of personal preparation more than once for each academic year.



UNIVERSITÀ DEGLI STUDI DI TORINO

4. If the candidate does not possess the specific curricular requirements referred to in paragraph 2, on the indication of the CMDC, he or she may possibly enroll in individual courses offered by the University and must successfully complete the relevant assessment before enrolling in the master's degree. Enrollment in the Master's Degree Course in Biotechnology for Neuroscience is in any case subject to successful completion of the interview aimed at verifying the adequacy of personal preparation.

ARTICLE 4

Duration of the study course

1. The normal duration of the course is two years. For the attainment of the degree, the student must acquire at least 120 ECTS, according to the indications contained in the form of training activities and credits relating to the curriculum of the three / two-year period included in the Didactic Regulations of the Course, as regulated in the Didactic Regulations of the University.
2. The average amount of overall learning commitment, carried out in a year by a student engaged full-time in university studies, is conventionally set at 60 credits. Part-time enrollment is also possible, according to the rules set by the University.
3. The credits corresponding to each training activity are acquired by the student by passing the exam or other form of verification of profit, carried out in the manner established in art. 7 of these regulations, in accordance with the University Didactic Regulations as well as with the Regulations of the relevant Departments.
4. Students enrolled in the Master's Degree Course in Biotechnology for Neuroscience do not lose their status as students: in the event of a prolonged interruption of the school career, this can be reactivated upon evaluation by the CMDC of the non-obsolescence of the training credits accrued before the interruption; in any case, even in the absence of prolonged interruptions, if the final qualification is not obtained within a period of time equal to double the normal duration of the course, all credits accrued up to then will be subject to verification of the non-obsolescence of the training contents.

ARTICLE 5

Training activities, teachings, curricula and teachers

1. The Master's Degree Course is not divided into curricula. The study plan is described in the Annex 2 attachment, which is updated annually.

ARTICOLE 6

Type of training activities

1. The didactic activities of the disciplinary sectors are divided into courses, according to a program divided into n. 2 teaching periods, approved by the CMDC and published in the Manifesto of studies. The articulation of the modules and the duration of the courses are established according to the indications of the relevant Department or the School. The teaching activities (lessons and exams) are held according to the starting date and the schedule established annually in accordance with the provisions of the following art. 7 paragraph 6, within the ordinary period of lessons



UNIVERSITÀ DEGLI STUDI DI TORINO

established in accordance with Article 23 paragraph 1 of the University Didactic Regulations.

2. Courses typically consist of 8 hours of frontal lessons and 17 hours of personal study for 1 credit. The workshops normally correspond to 300 hours for 12 credits.

3. The Master's Degree Course, in addition to training activities, can organize external workshops and internships in collaboration with Italian or foreign public and private institutions, depending on the needs, as it is practically practicable and there is an opportunity for training; they must be approved individually by the Degree Course Council and take place under the didactic responsibility of a Degree Course teacher. The didactic credits assigned to these activities will be fixed by the CMDC from time to time.

4. Students of the Master's Degree Course can obtain the recognition of internships, stages, etc., deemed consistent with the educational objectives of the Course by the Commission in charge (Student Career Evaluation Commission and Foreign Qualification Recognition, for brevity defined as the Career Commission), only if previously authorized.

5. As part of a growing integration with Italian and foreign university institutions, it is possible to replace training activities carried out in the Degree Course with other disciplines taught in Italian or foreign universities. This will take place within the framework of international agreements and programs, inter-university conventions, or specific conventions proposed by the Master's Degree Course, and approved by the Council of the Department or Departments of reference or of the School and approved by the competent academic body, with other university institutions. or of similar cultural significance.

ARTICLE 7

Exams and other assessments of student achievement

1. A final assessment is required for each training activity indicated at the end of the period in which the activity took place. For the training activities divided into modules, the final evaluation of the profit is in any case unitary and collegial. By passing the exam or verification, the student obtains the ECTS attributed to the specific training activity.

2. The final assessments may consist of: and oral exam or written assignment; a written or oral report on the activity carried out in the course; a test with free choice or multiple choice questions; a laboratory test or computer exercise. The methods of the final assessment, which may also include more than one of the forms indicated above, and the possibility of carrying out partial assessments *in itinere*, are indicated before the beginning of each academic year by the teacher in charge of the training activity. The methods by which the assessment is carried out must be the same for all students and comply with the provisions established at the beginning of the academic year.

3. The period for carrying out the exam sessions is set at the beginning of each academic year.

4. The exam sessions begin at the end of the teaching activity of the individual teaching courses.

5. The schedule of exams includes at least 6 sessions, appropriately distributed throughout the academic year in the months of June, July, September, January and February; moreover, 2 optional sessions are foreseen, distributed in the extraordinary sessions (Christmas Window and Easter Window).

6. The calendar of didactic activities (lessons and exams) for the Degree Programs is established annually by the CMDC, after consulting the President of the Course of Studies and the Monitoring and Review Commission.



UNIVERSITÀ DEGLI STUDI DI TORINO

7. The lesson timetable and the exam schedule are established by the CMDC in accordance with the provisions of the Study Program Regulations, having consulted the Monitoring and Review Commission and the teachers concerned.
8. The exam schedule is communicated at least 120 days in advance. The publicity of lesson times and sessions is ensured in the widest possible ways and means. The same applies to any other didactic activity, including the hours of availability of professors and researchers.
9. If, for a justified reason, an exam session has to be moved or the scheduled teaching activity cannot be carried out, the teacher must promptly notify the students and the head of the teaching structure for the relevant provisions and in accordance with the regulations existing.
10. The dates of the exams, once published, cannot be anticipated in any case; the exams are held according to a rough calendar prepared by the teacher on the day of the exam.
11. The interval between two successive appeals is at least ten days.
12. The examining committees are appointed by the Director of the Department or by the President of the CMDC. They are composed of at least two members and are chaired by the official professor of the course or by the professor indicated in the appointment provision. It is possible to work for sub-committees, where the members are sufficient. All students, upon request, have the right to be examined also by the President of the examination commission. Members other than the President can be other professors, researchers, experts on the subject. Recognition as an expert on the subject is approved by the Department Council on the proposal of the Degree Program Council.
13. The student can take the same exam three times in an academic year.
14. The President of the Commission informs the student of the outcome of the test and its evaluation before the official announcement of the result; up to this announcement, the student can withdraw from the exam without consequences for his / her personal curriculum that can be evaluated in order to obtain the final qualification. The presentation to the appeal must in any case be registered.
15. In determining the order in which students are to be examined, particular account is taken of the specific needs of student workers.
16. The exam grade is expressed out of thirty and the exam is considered passed if the score is greater than or equal to 18. Honors may be granted unanimously, if the final grade is 30.
17. The tests are public and the communication of the final grade is public.

ARTICLE 8

Final exam and foreign language

1. After having passed all the verifications of the educational activities included in the study plan and having acquired at least 120 ECTS, including those relating to the preparation of the final exam, the student, regardless of the number of years of university enrollment, is admitted to take the final exam, which consists in the presentation and discussion of the experimental data obtained for the purpose of preparing the Experimental Thesis.
2. *Preparation of the Experimental Thesis:* The student must carry out his experimental work for the final exam at a University Department or a structure affiliated with the University of Turin and under the responsibility of a Professor or Researcher belonging to the Master's Degree Course or to the Department of Neuroscience, called Supervisor, who also has duties of tutor (see below). The thesis must be organized according to the canons accepted by the international scientific community. In the event that the tutor permanently ceases teaching activity on a date prior to the discussion, his / her role is fully assumed by the teacher who takes over the teaching. The thesis



UNIVERSITÀ DEGLI STUDI DI TORINO

must be written in English. This paper must be accompanied by an adequate summary in Italian. The editorial rules will be published on the website of the master's degree program.

3. The final evaluation of the student's career must take into account the evaluations on the previous educational activities and on the final exam, as well as any other relevant element. The weighted average of the marks obtained in the exams and the evaluation of the thesis during the discussion contribute to determine the degree mark. There is the possibility of honors, mention and dignity of press, if the thesis work and / or the curriculum studiorum are unanimously deemed as deserving them. For the attribution of the final exam score, the Graduation Commission may assign from 0 to 7 points for quality and presentation of the thesis; to obtain honors, it will be necessary to obtain honors in at least two courses, or at least in one course if the starting average is higher than 105; honors in at least 5 exams are required for the mention. However, the attribution of scores is not automatic, but is at the discretion of the Commission, based on the completion of the thesis exam. The evaluation commission, made up of at least 7 professors, entrusts a member of the commission with the task of examiner, in charge of evaluating the scientific contents of the thesis. The thesis is discussed by the candidate in a public session, in front of the commission, which expresses the overall evaluation in one hundred tenths, depending on the written paper, the oral presentation and the judgment given by the supervisor.

ARTICLE 9

Enrollment and attendance of single courses

1. Those in possession of the necessary requirements to enroll in a course of study, or who already have a university degree, can enroll in individual courses taught at the University. The registration procedures are set out in the Student Regulations of the University of Turin.

ARTICLE 10

Prerequisites, Attendance obligations

1. There are no mandatory prerequisites.
2. Attendance to the various training activities is compulsory, for 75%.
3. The methods and verification of the compulsory attendance, where required, are established annually by the Degree Program and made known to students by the start date of enrollment through the Study Manifesto and the Student Guide.

ARTICLE 11

Career plan

1. The CMDC determines annually in these Regulations and in the Manifesto of Studies, the recommended training courses, also specifying the spaces for the autonomous choices of the students.
2. The student submits his / her career plan in compliance with the constraints envisaged by the ministerial decree relating to the class to which they belong, in the manner provided for in the study manifesto.



UNIVERSITÀ DEGLI STUDI DI TORINO

3. The career plan can be articulated on a longer duration than the normal one for part-time students, or, in the presence of an exceptionally high didactic performance, for the amount of credits obtained in previous academic years, on a shorter duration.
4. The career plan that does not adhere to the recommended training courses, but complies with the didactic regulations, is subject to the approval of the CMDC.
5. The resolutions referred to in paragraph 4 are taken within 40 days of the expiry of the deadline set for the presentation of career plans.

ARTICOLO 12

Riconoscimento di crediti in caso di passaggi, trasferimenti e seconde lauree

1. Unless otherwise specified, the CMDC proposes to the Council of the Department of Neuroscience whether or not the credits and academic qualifications obtained in other universities are recognized, including in the context of exchange programs. For the recognition of exams taken in courses other than the Master's Degree Course in Biotechnology for Neuroscience of the University of Turin, in relation to the transfer of students from another course of study or from another university, the CMDC will validate the exams taken, expressly indicating the type of training activity, the disciplinary field, the disciplinary scientific sector and the number of ECTS covered in the didactic system, as well as the year of the course in which the student is inserted, based on the number of validated exams ; in the case of didactically equivalent exams, they must be declared as such with a specific resolution, possibly resorting also to interviews, to verify the knowledge actually possessed. The non-recognition of credits will be motivated. Students who come from master's degree courses of the same class are guaranteed recognition of at least 50% of the credits accrued in the place of origin.
2. The maximum number of credits that can be recognized is determined by the division of credits established in the Didactic Regulations of the Master's Degree Course.
3. For exams not included in the scientific-disciplinary sectors indicated by the Didactic Regulations of the Master's Degree Course or exceeding the limits referred to in paragraph 2 above, at the request of the student a maximum of 8 credits may be recognized as "Activities courses chosen by the student ".
4. It will be possible to recognize credits completed in "Further training activities" (D. M. 270/04, art. 10, c. 5, d), for a maximum of 12 credits.
5. Except in the case of coming from other Degree Courses of the LM-9 class, the number of credits recognized cannot exceed the maximum limit of 45.
6. In the case of students who already have a university degree of the same level, the recognition of the credits will be examined and approved from time to time by the competent committees of the course.

ARTICLE 13

Teachers

- A. Teachers of the course.

The updated list of Professors with their curriculum vitae is published on the Master's Degree Course website at <https://www.biotechnologyneuroscience.unito.it/do/home.pl> and is updated at the beginning of the academic year.



UNIVERSITÀ DEGLI STUDI DI TORINO

B. Reference teachers (*as per Directorial Decree 10/06/2008, n.61, drawn up on the basis of current teaching resources, to be updated annually*)

BOZZALI	MARCO	MED/26 PA
BUFFO	ANNALISA	BIO/09 PA
ZIBETTI	MAURIZIO	MED/26 RD
COLLINO	MASSIMO	BIO/14 PO
PIZZAGALLI	FABRIZIO	FIS/07 RD
BODA	ENRICA	BIO/16 PA

ARTICLE 14

Orientation and Tutoring

1. Orientation activities include information-based initiatives (such as Orientation Days, welcome and welcome days for freshmen), training and consultancy initiatives aimed at future freshmen.
2. The tutoring includes student assistance activities aimed at making university studies more effective and productive, improving the quality of learning and providing advice on study plans, international mobility, training offers before and after graduation. Tutoring activities are carried out, as far as they are concerned, by the Teachers of the Master's Degree Course (Teachers holding frontal courses), the Traineeship Teachers and the Referent Professor for internationalization. The tutoring activity for students close to graduating will be offered by the Supervisor of the final dissertation. For job-related tutoring and career orientation, the students of the Degree Course can take advantage on the appropriate structures (Job Placement) activated at the School of Medicine.

ARTICLE 15

Quality Assurance, Monitoring and Review Commission

1. The President of the Degree Program is the Head of Quality Assurance and of the monitoring and review processes; she/he can appoint its own Delegate as the Quality Assurance contact person.
2. The Monitoring and Review Commission is set up in the Study Program Board, which is composed of the Study Program President acting as Coordinator, his possible Quality Assurance Delegate, as well as students and teachers appointed by the Board, respectively, among the students enrolled in the Degree Program, on the proposal of the student representatives, and among the teachers who make up the Council. The number of the Commission must not be less than four members. In the composition of the Commission, the condition of equality must be favored, guaranteeing in any case a participation of a proportion of students of at least 25%, and in any case not less than 2. The Commission is permanent and remains in office for three academic years. If a member resigns for any reason, the Commission is reinstated by the Board in the immediately following session. The mandate of the successor expires at the end of the three-year period.
3. The main functions of the Commission are as follows:
 - discussion between teachers and students;
 - self-assessment and drafting of the annual monitoring review, as well as of the cyclical review of the study program, including the monitoring of the proposed corrective actions;
 - preliminary investigation on issues relating to the effectiveness and functionality of teaching activities (including the control of teaching cards), study plans, tutoring and services provided to students; on the indicators of the Degree Program; on the opinion of students, of which it ensures adequate dissemination;



UNIVERSITÀ DEGLI STUDI DI TORINO

- to support the President of the Degree Program in preparing and updating the information on the SUA-CdS form;
 - to interface with the central didactic structures of connecting with the Course.
4. The Commission meets at the end of the teaching periods and at the deadlines set for the various activities (not less than twice a year).
 5. The members of the Joint Teaching Commission (of the Department or of the School of reference for the Study Program) cannot be part of the Monitoring and Review Commission.

ARTICLE 16

Self-assessment procedures

1. Annual monitoring and cyclical review are periodic and planned self-assessment processes that have the purpose of monitoring training activities and verifying the adequacy of the learning objectives that the Degree Program has set, the correspondence between the objectives and the results and effectiveness of the way the Course is run. In order to adopt all the appropriate corrective and improvement measures, the annual monitoring and cyclical review identify the causes of any critical issues, by providing concrete corrective actions together with times, methods and persons responsible for their implementation.
2. The President of the Degree Program supervises the preparation of the annual Monitoring and the Cyclical Review, which are instructed and discussed collectively.
3. The Study Program President submits the annual monitoring and cyclical review to the approval of the Study Program Board, which assumes responsibility for it.

ARTICLE 17

Other Commissions

1. A Steering Committee is set up within the Degree Program Council, with the aim of:
 - maintaining a close relationship with the social partners and a constant adaptation of the course to the changing needs of the world of work;
 - consulting about the activities of bringing undergraduates closer to the world of work, also through internships aimed at drafting degree theses.
 - deciding on the advisability of a new consultation of the social partners.The Steering Committee will consist of: the Director and the deputy Directors, for teaching and research, of the Department of Neuroscience; the President of the CMDC; a representative of the School of Medicine; two student representatives; a representative of the Industrial Liaison Office of the University of Turin; at least six representatives of institutions of the productive world. The Steering Committee will be convened on the initiative of the president of the CMDC at least once a year.
2. The CMDC may set up temporary or permanent commissions, with instructive and / or consultative tasks, or with operational tasks delegated by the council. The permanent committees can be delegated specific decision-making functions (relating for example to students' careers) according to the rules and types set out in the Degree Program Regulations. Against the resolutions of the Commissions it is however possible to apply to the Degree Program Board.

ARTICLE 18



UNIVERSITÀ DEGLI STUDI DI TORINO

Changes to the regulations

1. The didactic regulations of the degree program are approved by the Department Board.
2. The didactic regulations of the courses of study are annually adapted to the public educational offer and consequently are linked to the cohort referring to the academic year of first enrollment in a specific course of study.

ARTICLE 19

Transitional rules

1. Students who at the time of activation of the Master's Degree Course in Biotechnology for Neuroscience are already enrolled in a previous system have the right to opt for enrollment in the new course. The Master's Degree Course Council determines the credits to be assigned to the courses envisaged by the previous teaching regulations and, where necessary, evaluates the careers of students already enrolled in terms of credits; establishes the individual study path to be assigned for the completion of the career plan.
2. For the parts of the Regulation art. 6 *Type of training activities* and art. 7 *Exams and other verifications of students' achievement*, please refer to the link:
[“https://www.unito.it/ateneo/gli-speciali/coronavirus-aggiornamenti-la-comunita-universitaria/didattica-alternativa”](https://www.unito.it/ateneo/gli-speciali/coronavirus-aggiornamenti-la-comunita-universitaria/didattica-alternativa)

Annex 1

RAD

Annex 2

Typical Training Path