#### **University of Trieste**

# Department of Life Sciences Educational Regulations for the Degree Program in Neurosciences

(Master's Degree - LM6 in Biology)

#### **Article 1 - General Provisions**

- **1.** These Educational Regulations specify the organizational aspects of the Degree Program for obtaining the International Master's Degree in Neurosciences. These Regulations are drafted in consideration of:
- a. Decree of October 22, 2004, No. 270, published in the Official Gazette on November 12, 2004, No. 266: "Modifications to the regulations concerning the educational autonomy of universities";
- b. Law of December 30, 2010, No. 240, published in the Official Gazette No. 10 on January 14, 2011 Supplement No. 11: "Regulations on the organization of universities, academic staff, and recruitment, as well as delegation to the Government to promote the quality and efficiency of the university system";
- c. The Regulations of the Department of Life Sciences;
- d. The rules outlined in the University Educational Regulations, respecting the freedom of teaching and the rights and duties of faculty and students.
- **2.** These Educational Regulations are annually deliberated by the Department Council, particularly regarding the number of credits assigned to each course or other educational activity.
- **3.** For the purposes of these Regulations, the following terms are defined as:
- RDA: The University Educational Regulations of the University of Trieste;
- Department: The Department of Life Sciences at the University of Trieste;
- Degree: The International Master's Degree in Neurosciences;
- Degree Program: The Degree Program in Neurosciences (LM6 class);
- Council: The Council of the Degree Program in Neurosciences (if established) or the Department Council (if the Degree Program Council is not established);
- Coordinator: The Coordinator of the Degree Program in Neurosciences;
- Educational Committee: The Educational Committee of the Degree Program in Neurosciences;
- CFU: University Educational Credit;
- SSD: Scientific Disciplinary Sector;
- PDS: Study Plan;
- TAF: Type of Educational Activity.
- **4.** These Regulations are published in full on the Degree Program's website: Neurosciences LM Website.

#### **Article 2 - Specific Educational Objectives**

The International Master's Degree Program in Neurosciences aims to train graduates with an in-depth knowledge in the field of Neurosciences, specifically regarding the structure, function and evolution of the nervous system in living organisms, including humans, under both physiological and pathological conditions. Graduates in Neurosciences will acquire an advanced knowledge of essential mathematical and computational tools and a solid preparation in the use of methodologies and equipment for data acquisition and analysis. The program includes educational activities focused on basic neurobiology and its applications, with special attention to comparative and applied knowledge at the molecular, cellular, tissue and systemic levels, including higher cognitive processing. Practical and laboratory training will involve the use of experimental methods and specific tools to gain specialized skills in one or more areas of basic or applied neurobiology. The Master's Degree Program also provides for internships at companies, public administration structures and laboratories in scientific institutions and research entities, both national and international, with whom close collaborations exist. Particular attention is given to opportunities for training abroad through Erasmus collaborations and exchange agreements.

The thesis work involves original and experimental research, either basic or applied, demonstrating the student's scientific and managerial autonomy. This work represents a significant period in the graduate's training. Graduates will be able to engage in professional and managerial activities recognized by current regulations as part of the biologist's professional role, particularly in fields that require broad cultural training and a high professional profile, which are the natural prosecution of those already covered by graduates in the Bachelor's Degree Class L13. Graduates may also pursue further education through doctoral programs, post-graduate residency programs, etc., either in research or for enhancing their professional level.

The teaching and laboratory facilities are located at the University of Trieste and affiliated external public and private entities with which educational collaboration agreements are in place.

#### **Article 3 - Deputy Coordinator and Educational Board**

- 1. The Coordinator may appoint a Deputy Coordinator, who assumes all the Coordinator's duties in their absence. The Deputy Coordinator is selected among the faculty members of the Degree Program Council.
- 2. Established pursuant to Article 5 of the University Educational Regulations (RDA), the Educational Board consists of the Coordinator, at least two faculty members designated by the Coordinator, and a number of student representatives equal to the number of faculty members, including the Coordinator. The faculty component's term on the board coincides with the Coordinator's term. The student component's term aligns with their representation in the Council or is renewed in the event of a vacancy.
- 3. The board carries out tasks assigned by these Regulations or the Department, formulating proposals regarding the organization of the Degree Program and suggesting necessary adjustments to enhance overall teaching efficiency. Specifically, the board:
- a) Proposes the temporal distribution of educational activities within the Department's academic calendar and evaluates actual workloads during each academic period;
- b) Coordinates the dates for written, oral, and practical exams and organizes graduation sessions;
- c) Coordinates tutoring activities;
- d) Oversees procedures related to study plans, transfers, credit recognition, and internship or training requests;
- e) Manages student relations and supervises the Degree Program's website.
- 4. The Educational Board also serves as the Quality Assurance (AQ) Group for the Degree Program.

# **Article 4 - Admission to the Degree Program**

- 1. Graduates of Bachelor's programs in Biological Sciences (Class L13) or Biotechnology (Class L2) under Ministerial Decree 270/04, as well as equivalent degree classes under Ministerial Decree 509/99, or holders of an equivalent qualification, are eligible for admission.
- Candidates holding a three-year university degree or diploma are eligible for admission provided they have acquired at least 60 CFU (University Educational Credits) in the relevant SSD (Scientific-Disciplinary Sectors) specified below:
- At least 15 CFU in one or more of the following SSDs: CHIM/01 to CHIM/12 (Chemistry), MAT/01 to MAT/09 (Mathematics), FIS/01 to FIS/08 (Physics), INF/01 (Computer Science), MED/01 (Medicine), SECS/01-02 (Economics).
- At least 20 CFU in one or more of the following SSDs: BIO/01 (Botany), BIO/04 to BIO/07 (Various Biology Disciplines), BIO/09 (Physiology), BIO/16 (Anatomy), BIO/17 (Histology), MED/04 to MED/08 (Various Medical Disciplines), M-PSI/02 (Psychobiology), VET/01, VET/02 (Veterinary Sciences).
- At least 25 CFU in one or more of the following SSDs: BIO/10 to BIO/14 (Biological Disciplines), BIO/18 (Genetics), BIO/19 (Microbiology), MED/03, MED/07 (Medical Disciplines), AGR/07, AGR/16 (Agricultural Sciences).

To be eligible for admission, candidates lacking these curricular requirements must complete the missing CFUs before enrollment, through individual courses and passing the relevant exams.

3. As part of the evaluation of their academic career, Candidates must demonstrate English proficiency equivalent to at least **level B2** of the Common European Framework of Reference for Languages (CEFR). Proficiency may be evidenced by academic records or appropriate

- certification recognized by the university. Native speakers or those from countries where English is the official language are exempt from this requirement. All other candidates must pass a language test administered by the university.
- 4. Candidates with a Bachelor's degree grade of **99/110** or higher are automatically admitted, as this score indicates adequate individual preparation.
- 5. Candidates in possess of the academic requisites but with a degree grade below 99/110 undergo an evaluation of their academic records by the Educational Board. The Board may: a) Positively evaluate the academic curriculum and approve the candidate's admission; b) Negatively evaluate the academic curriculum and reject the candidate's admission; c) Require a preparatory assessment, also through online platforms, on relevant subjects to determine admission.
- 6. Candidates with a foreign degree deemed equivalent will be evaluated similarly, including a conversion of credits into CFU and determining equivalence for final evaluation. A mandatory assessment will ensure the candidate possesses the necessary knowledge for admission.
- 7. The Committee's evaluation of candidates is final and cannot be appealed.

#### Article 5 - Study Plan

- 1. The Degree Program lasts two years and includes educational activities in the following categories, as per Article 10 of Ministerial Decree 270/04: Core educational activities, Related and supplementary educational activities and Other educational activities, such as electives courses (Art. 10, Paragraph 5, Letter a), activities related to the final examination (Art. 10, Paragraph 5, Letter c), and additional educational activities (Art. 10, Paragraph 5, Letter d) that include internships and curriculum counselling activities. A set number of CFU is assigned to each category; a total of 120 CFU is required over the two years.
- 2. The Study Plan, which includes a list of courses and other educational activities, is approved by the Department Council and attached to these Regulations (Annex 1).
- 3. Students must submit their Study Plan following the procedures established by the university and published on the Student Office and Degree Program websites. Students may exercise options available under the general Study Plan attached to these Regulations and choose elective courses.
- 4. Students can choose elective courses from courses offered annually by the Department or those specifically listed in the educational offering database. Electives may also include courses from other university Degree Programs, provided they align with the student's academic path.
- 5. Study Plans are approved by the Counsil. Study Plans that adhere to the mandatory course requirements outlined in the general Study Plan and contain pre-approved elective courses are automatically approved.
- 6. Any prerequisites for courses and the minimum number of credits required at certain stages, differentiated for full-time students or those engaged in concurrent work, are specified in the attached Study Plan.
- 7. Credits for internships, training, or other practical activities are assigned by the Degree Program Council upon student request and evaluation of the internship's completion, as confirmed by the traineeship/internship tutor. The details of the procedure are provided on the Degree Program's website.

#### **Article 6 - Attendance Requirements**

- 1. Attendance requirements are determined by the Degree Program Council, based on proposals from the Educational Board. According to the current regulations, students must attend at least two-thirds of the lectures for each course in the Degree Program. Faculty members are responsible for monitoring attendance.
- 2. The Educational Board may establish substitute activities for students who are employed or have disabilities. These substitutes may include additional support such as distance learning resources for non-attending or part-time students.

# Article 7 - Types of Teaching, Exams, and Other Assessments of Student Progress

1. Each CFU (University Educational Credit) corresponds to an average workload of 25 hours for the student, allocated as follows: 32% (8 hours) for lectures and classroom exercises, 68% (17 hours)

for independent study or study assisted by tutors. For laboratory activities: 48% (12 hours) for experimental work, 52% (13 hours) for personal data analysis and interpretation, either independently or under tutor supervision.

- 2. Assisted teaching may include:
- a) Classroom lectures, possibly supported by multimedia audiovisual tools;
- b) Exercises in classrooms or computer labs;
- c) Laboratory experiments, performed individually or in groups;
- d) External courses or experiments conducted at partner institutions, other Italian or foreign universities or public/private entities under agreements or conventions.

Laboratory activities are defined and coordinated by the course instructor and explained during lectures.

- 3. Activities that award CFU are evaluated according to the University Educational Regulations (RDA). Examinations may include written, oral, and practical tests. Assignments during or at the end of courses may be used to assess progress and may concur to determine the final mark; they can be completed individually or in groups.
- 4. Detailed educational objectives for each course are attached to these Regulations (Annex 2) and published on the Degree Program's website. Information on final assessments for each course is also published on the website.
- 5. The Educational Board may grant CFU for foreign language proficiency if students present valid certification from recognized external institutions without additional testing. Additional CFU may be granted for documented language or IT skills acquired through recognized institutions, within the limit set for the specific type of activity, provided they are not used for other credits.
- 6. The Committee can propose recognizing credits for students who provide certification of professional skills or other post-secondary competencies developed in activities designed or implemented with university collaboration. Specific procedures and limitations for recognizing such credits are outlined on the Degree Program's website.
- 7. Every two years, the Educational Committee evaluates the relevance of previously acquired credits and may set requirements for updating knowledge where necessary.

# **Article 8 - Examinations of Academic Performance**

- Courses related to core subjects, related/supplementary subjects (DM 270/2004, Art. 10, Paragraphs 1a and 5b), and elective subjects (DM 270/2004, Art. 10, Paragraph 5a) are assessed through examinations with grades expressed on a scale of thirtieths. For multi-module courses, the final grade is the weighted average of the grades obtained in each module, based on the CFU assigned to each module.
- 2. Exams are conducted exclusively during the official exam sessions established by the university. The Department sets the exam calendar annually.
- 3. Passed exams must be registered no later than the exam session following the one in which the exam was taken.
- 4. If modules are held in different semesters, the exam for the module in the second semester (and the registration of the final composite grade) may only be taken starting from the summer session.

#### **Article 9 - Final Examination and Degree Conferment**

- 1. To be admitted to the final examination to obtain the Degree, students must complete a practical laboratory activity (internship) lasting at least 8 months.
- 2. The final examination consists of the preparation and public defense of an experimental thesis. The thesis must present results from original research, either basic or applied, demonstrating the student's scientific autonomy and managerial skills. The thesis work and the preparation of the thesis is conducted under the supervision of a Thesis Advisor (Relatore), who must be a faculty member or researcher affiliated with the Degree Program Council. If the person directly supervising the student's research differs from the Thesis Advisor, that person is appointed as Co-Advisor (Correlatore), who may not necessarily be affiliated with the Degree Program Council.
- 3. The thesis must be written and defended in English in the presence of the Examination Committee. An Opponent (Lettore) is assigned to each thesis to evaluate the content and suggest areas for further discussion during the defense. The Opponent must receive a copy of the thesis

- within the deadlines established by the Degree Program Regulations and may attend the defense remotely. Students may send a thesis summary to the committee members via email.
- 4. The Examination Committee for the final examination consists of five faculty members, appointed by the Department Director, as per Article 25, Paragraph 5 of the University Educational Regulations.
- 5. The thesis can contribute up to 7 additional points to the final degree score, distributed as follows: up to 3 points awarded by the Thesis Advisor; up to 2 points awarded by the Opponent; Up to 2 points awarded by the Examination Committee. An additional point is awarded if the student completes the degree within the extraordinary session of the second academic year.
- 6. The final degree grade is determined by the sum of the weighted arithmetic average of the grades obtained in the exams (expressed in 110ths) and the points awarded for the thesis. The weighted average includes grades from core, related/supplementary, and elective courses, all registered on a 30-point scale. Honors (lode) may be granted at the committee's discretion if the total score exceeds 110/110 and must be approved by the majority of the committee.

## Article 10 - Transfer of Students from Other Degree Programs

- Subject to the provisions of Article 4 regarding admission requirements, requests to transfer from another Degree Program or another university, as well as requests for credit recognition to shorten the degree duration, are evaluated by the Degree Program Council. The Educational Board reviews the student's academic curriculum, consults with the student if necessary, and proposes the recognition of previously completed exams in terms of CFU and grades to the Degree Program Council. The deadlines for submitting transfer applications are set by the university.
- 2. Students enrolled at foreign universities may request transfer to this Degree Program, with the possibility of shortening the duration of their studies. The Educational Board assesses the relevance of the student's prior knowledge and competencies to the educational objectives of the Neurosciences Degree Program. Where applicable, the European Credit Transfer System (ECTS) is used, and the committee proposes the necessary resolutions to the Council.

# **Article 11 - Enrollment of Diploma and Degree Holders**

- 1. Graduates holding a university diploma or a degree from the previous Italian academic system may have their previously earned credits recognized. All other provisions follow the regulations outlined in Article 4 concerning admission requirements.
- 2. The recognition of completed exams, in terms of CFU and grades, follows the procedures established in Article 10.

## **Article 12 - Final Provisions**

For anything not explicitly covered by these Regulations, the Degree Program Council will establish, through specific resolutions, any additional rules necessary for the educational activities of the Degree Program.