#### University of Oum El Bouaghi

## Faculty of Exact sciences and natural sciences and life

#### Department of natural sciences and life

# Program name: Master's degree in Biology and physiology of Reproduction

• Level: Master

• Domain: Natural Sciences and Life

• Field: Biological Sciences

Specialty: Biology and physiology of Reproduction

#### 1. Program Description:

Progress and development in the world are ensured through scientific research in the field of science and technology. In recent years, we have seen a gradual emergence of specialties in the field of natural and life sciences in our country. It is in this context that the Faculty of Exact Sciences and Sciences of Nature and Life at the University of Larbi ben M'Hidi in Oum El Bouaghi offers the Master "Biology and Physiology of Reproduction" within the framework activities of the department of natural and life sciences.

This specialty offers a fundamental education. This Master will allow students currently at the end of the "Biology and Animal Physiology" license cycle to continue their training in the second course of the LMD

system. This Master's aims to provide in-depth high-level training and lead to the defense of a thesis in Biology and Physiology of reproduction with the aim of pursuing research studies for obtaining the Doctorate.

Students will have to acquire skills in the cellular and molecular aspects of reproductive biology but also skills in molecular quantitative genetics. Their training in the first year of the Master's will give them general skills that complement their initial training. Each student of the specialty will have to acquire autonomy in the search for information, the capacity for critical analysis of scientific work. Students will also have their knowledge updated by introducing the results of the latest discoveries in the field of reproductive biology by calling on the intervention of recognized researchers in this field.

The research-oriented Master's program prepares the student to continue his studies to obtain the doctorate which will lead him to the exercise of the function of Professor-researcher. In addition, this master, as proposed, will introduce students to the methods and practices of fundamental and applied research in the field of animal reproduction.

Following the course offered as part of this training, graduates in this option will also be able to integrate into different socio-economic sectors such as: agronomic sectors and research laboratories..

#### - Entry Requirements

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Students qualified to continue their training in this specialty are selected from among those who hold the following diplomas:

- Bachelor's degree in biology and animal physiology
- Bachelor's degree in animal Eco-biology
- Bachelor's degree in animal Eco-physiology
- Other graduates in biology (after studding the application files)
- Certain Higher Education Diplomas (D.E.S) in biology (after studding the application files).

Students enrolled at the specialization are supervised by qualified professors who belong to the whole at the University of Larbi Ben M'hidi in Oum El-Bouaghi. The faculty also provides students with a number of educational and research laboratories equipped and supplied with scientific means ensuring training at the desired level:

- Animal physiology laboratory. With the capacity of 20 students.
- Biochemistry laboratory. With the capacity of 20 students.

Scientific internships are proposed to students to carry out their end-ofstudies dissertations and improve their scientific level in establishments under contract with the University of Larbi Ben M'hidi:

- Directorate of Health and Population of Oum El Bouaghi
- Technical Institute for Animal Husbandry, Ain Melilla

- Pathological anatomy laboratory in Ain Melilla
- Animal Husbandry Station of Constantine

#### 2. Program Units and modules:

**1** st **Semester**: 14-16 Weeks (375h)

- <u>Fundamental Units</u>: Physiology of Reproduction (*C: 03, HV: 67,5*<sup>h</sup>), Fundamental Toxicology (*C: 03, HV: 67,5*<sup>h</sup>), Immunology (*C: 03, HV: 67,5*<sup>h</sup>).

- Methodological Units: Practical courses in special histology ( $C: 03, HV: 60^h$ ), Computer science ( $C: 02, HV: 45^h$ ),.
- Discovery Units: Pathogenic Agents ( $C: 01, HV: 45^h$ ).
- Transversal Units: Communication (*C: 01, HV: 22,5*<sup>h</sup>).
- \* C: Coefficient
- \* HV: Hourly Volume

### **2** <sup>nd</sup> **Semester**: 14-16 Weeks (375<sup>h</sup>)

- Fundamental Units: Molecular Biology ( $C: 03, HV: 67,5^h$ ), Cellular and Molecular aspect of development ( $C: 03, HV: 67,5^h$ ), Enzymology ( $C: 03, HV: 67,5^h$ ).
- Methodological Units: Plant Extraction Techniques ( $C: 03, HV: 60^h$ ), Microtechniques ( $C: 02, HV: 45^h$ ),.
- Discovery Units: Biostatistics (*C: 01, HV: 45*<sup>h</sup>).
- Transversal Units: Legislation (*C: 01, HV: 22,5*<sup>h</sup>).
- \* C: Coefficient
- \* HV: Hourly Volume

**3<sup>rd</sup> Semester**: 14-16 Weeks (375<sup>h</sup>)

- <u>Fundamental Units</u>: Physiopathology of Reproduction ( $C: 03, HV: 67, 5^h$ ), Endocrinology of Reproduction ( $C: 03, HV: 67, 5^h$ ), Toxico-Pharmacology of Reproduction ( $C: 03, HV: 67, 5^h$ ).
- Methodological Units: Animal husbandry Techniques ( $C: 03, HV: 60^h$ ), Article Analysis ( $C: 02, HV: 45^h$ ),.
- Discovery Units: Bio-climatology (C: 01, HV: 45<sup>h</sup>).
- Transversal Units: Entrepreneurship (*C: 01, HV: 22,5*<sup>h</sup>).
- \* C: Coefficient
- \* HV: Hourly Volume

**4**<sup>th</sup> **Semester**: 14-16 Weeks (550<sup>h</sup>)

- Internships and drafting of the master's thesis (C: 15,  $HV: 550^h$ ).
- \* C: Coefficient
- \* HV: Hourly Volume

#### 3. Other

Students can propose a creative projects idea through within their master's thesis by creating their own Strat-up, allowing them to enter the world of work and to contribute to the development of the national economy. And they will find all the facilities of all the people involved from the administration of the House of Entrepreneurship at the university and their supervising professors.