

**At Louvain-la-Neuve - 120 credits - 2 years - Day schedule - In French**Dissertation/Graduation Project : **YES** - Internship : **YES**Activities in English: **NO** - Activities in other languages : **NO**Activities on other sites : **NO**Main study domain : **Sciences de l'éducation et Enseignement**Organized by: **Faculty of Science (SC)**Programme acronym: **BIOL2M4****Table of contents**

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## BIOL2M4 - Introduction

### Introduction

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## BIOL2M4 - Teaching profile

### Learning outcomes

On successful completion of this programme, each student is able to :

- 1
- 2
- 3
- 4

## BIOL2M4 Programme

### Detailed programme by subject

#### CORE COURSES

- Mandatory
- ⊗ Optional
- △ Not offered in 2026-2027
- ⊙ Not offered in 2026-2027 but offered the following year
- ⊕ Offered in 2026-2027 but not the following year
- △ ⊕ Not offered in 2026-2027 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year

1 2

#### o Didactique et Pédagogie (25 credits)

##### o Un cours parmi :

|             |  |  |                                    |   |
|-------------|--|--|------------------------------------|---|
| ⊗ LEISS2101 | <a href="#">General pedagogy</a><br><i>Cours dispensé à LLN en horaire de jour</i> |  | FR [q1] [37.5h] [5 Credits] 🌐      | X |
| ⊗ LEISS2102 | <a href="#">General pedagogy</a><br><i>Cours dispensé à LLN en horaire décalé</i>  |  | FR [q1] [37.5h] [5 Credits] 🌐      | X |
| ⊗ MEISS2103 | <a href="#">General pedagogy</a><br><i>Cours dispensé à Mons en horaire décalé</i> |  | FR [q1] [30h] [5 Credits] 🌐        | X |
| ● LEISS2107 | <a href="#">School and diversities</a>   |  | FR [q1] [22.5h+15h] [5 Credits] 🌐  | X |
| ● LSCI2360  | <a href="#">Teaching and learning core sciences</a>                                |  | FR [q1] [37.5h] [5 Credits] 🌐      | X |
| ● LBIO2320A | <a href="#">Didactics and epistemology of science and biology - D2</a>             |  | FR [q1] [22.5h+7.5h] [3 Credits] 🌐 | X |
| ● LBIO2320B | <a href="#">Didactics and epistemology of science and biology - D3</a>             |  | FR [q2] [22.5h+7.5h] [3 Credits] 🌐 | X |

##### o Un cours parmi :

|              |   |  |                                    |   |
|--------------|---|--|------------------------------------|---|
| ⊗ LCHM2320D  | <a href="#">Didactics and epistemology of science and chemistry</a> |  | FR [q1+q2] [20h+20h] [4 Credits] 🌐 | X |
| ⊗ LPHYS2320D | <a href="#">Didactics and epistemology of science and physics</a>   |  | FR [q1+q2] [30h] [4 Credits] 🌐     | X |

**O Sciences humaines et sociales (15 credits)****O Un cours parmi :**

|             |   |   |                                   |   |  |
|-------------|---|---|-----------------------------------|---|--|
| ⊗ LEISS2201 | Developmental and learning psychology<br><i>Cours dispensé à LLN en horaire de jour</i> | Véronique Leroy (compensates)<br>Baptiste Barbot<br>Nathalie Roland<br>Morgane Senden | FR [q2] [37.5h+15h] [4 Credits] 🌐 | X |  |
| ⊗ LEISS2202 | Developmental and learning psychology<br><i>Cours dispensé à LLN en horaire décalé</i>  | Véronique Leroy<br>Nathalie Roland<br>Morgane Senden                                  | FR [q2] [37.5h+15h] [4 Credits] 🌐 | X |  |

**O Un cours parmi :**

|             |   |                                    |                                   |   |  |
|-------------|---|------------------------------------|-----------------------------------|---|--|
| ⊗ LEISS2203 | Social, cultural, and political approaches to education<br><i>Cours dispensé à LLN en horaire de jour</i> | Branka Cattonar<br>Vincent Dupriez | FR [q2] [37.5h+15h] [4 Credits] 🌐 | X |  |
| ⊗ LEISS2204 | Social, cultural, and political approaches to education<br><i>Cours dispensé à LLN en horaire décalé</i>  | Branka Cattonar<br>Vincent Dupriez | FR [q2] [37.5h+15h] [4 Credits] 🌐 | X |  |

**O Un cours parmi :**

|             |  |                |                               |   |  |
|-------------|--|----------------|-------------------------------|---|--|
| ⊗ LEISS2205 | Ethics of education, neutrality, and citizenship<br><i>Cours dispensé à LLN en horaire de jour</i> | Hervé Pourtois | FR [q2] [22.5h] [2 Credits] 🌐 | X |  |
| ⊗ LEISS2206 | Ethics of education, neutrality, and citizenship<br><i>Cours dispensé à LLN en horaire décalé</i>  | John Pitseys   | FR [q2] [22.5h] [2 Credits] 🌐 | X |  |

**O Un cours parmi :**

|             |  |  |                                   |   |  |
|-------------|--|--|-----------------------------------|---|--|
| ⊗ LEISS2104 | Communication in school contexts<br><i>Cours dispensé à LLN en horaire de jour</i> |  | FR [q1] [22.5h+15h] [5 Credits] 🌐 | X |  |
| ⊗ LEISS2105 | Communication in school contexts<br><i>Cours dispensé à LLN en horaire décalé</i>  |  | FR [q1] [22.5h+15h] [5 Credits] 🌐 | X |  |
| ⊗ MEISS2106 | Communication in school contexts<br><i>Cours dispensé à Mons en horaire décalé</i> |  | FR [q1] [15h+15h] [5 Credits] 🌐   | X |  |

**O Stages (20 credits)**

|            |   |  |                                       |   |   |
|------------|---|--|---------------------------------------|---|---|
| ○ LSCI2370 | Observation internship in common core sciences (24 hours) and support seminar |  | FR [q1] [15h] [5 Credits] 🌐           | X |   |
| ○ LBIO2350 | Long internship (90 hours) and accompanying seminar in biology and science    |  | FR [q1+q2] [45h+22.5h] [15 Credits] 🌐 |   | X |

**O Formation disciplinaire (40 credits)**

|             |   |   |   |   |   |
|-------------|---|---|---|---|---|
| ○ LBOE2111  | Advanced and applied evolutionary biology                       | Simon Baeckens  | FR [q1] [35h+30h] [3 Credits] 🌐                         | X |   |
| ○ LBOE2120  | Conservation de la biodiversité                                 | Nicolas Schtickzelle                                  | FR [q1] [45h+15h] [4 Credits] 🌐                         | X |   |
| ○ LBRMC2101 | Genetic engineering   | François Chaumont (coord.)<br>Charles Hachez          | FR [q1] [37.5h+15h] [5 Credits] 🌐<br>> English-friendly | X | X |
| ○ LBOE2191  | Ecology and society   | Hans Van Dyck   | FR [q2] [30h] [2 Credits] 🌐                             | X |   |
| ○ LBOE2161  | Behavioral ecology and sociobiology                             | Hans Van Dyck   | FR [q2] [30h+15h] [4 Credits] 🌐                         | X |   |
| ○ LSEXM2710 | Biological approaches to sexual and human reproductive function | Philippe Lysy<br>Maxime Sempels<br>Patricia Steenhaut | FR [q1] [45h] [6 Credits] 🌐                             | X | X |
| ○ LSST1002M | Information and critical thinking - MOOC                        |   | FR [q1] [30h+15h] [3 Credits] 🌐                         | X |   |

**O Un cours parmi :**

|              |   |  |                                    |  |   |
|--------------|---|--|------------------------------------|--|---|
| ⊗ LCHM2320D  | Didactics and epistemology of science and chemistry |  | FR [q1+q2] [20h+20h] [4 Credits] 🌐 |  | X |
| ⊗ LPHYS2320D | Didactics and epistemology of science and physics   |  | FR [q1+q2] [30h] [4 Credits] 🌐     |  | X |

**O Un cours parmi :**

|              |   |   |                             |   |   |
|--------------|---|---|-----------------------------|---|---|
| ⊗ LBBMC2102  | Integrated molecular and cellular biology | Henri Batoko<br>Bernard Hallet<br>Pierre Morsomme<br>Melissa Page | EN [q1] [30h] [3 Credits] 🌐 | X | X |
| ⊗ LVETE1337B | Immunology - Lectures                     |   | FR [q1] [25h] [3 Credits] 🌐 | X | X |

**o Cours au choix (6 credits)**

Compléter le programme du premier bloc annuel par 6 crédits de cours dispensés au second quadrimestre à choisir dans les programmes de master BOE et BBMC.

**o Recherche et intégration (20 credits)**

Les trois UE doivent obligatoirement être suivies la même année.

|             |   |                    |                            |  |   |
|-------------|---|--------------------|----------------------------|--|---|
| o LEISS2902 | Introduction to educational research<br>Cours dispensé à LLN en horaire de jour | Stéphane Colognesi | FR [q1] [15h] [2 Credits]  |  | X |
| o LSCI2350  | Master thesis   |                    | FR [q1+q2] [] [15 Credits] |  | X |

**o Séminaire d'accompagnement au choix**

|             |   |   |                                      |  |   |
|-------------|---|---|--------------------------------------|--|---|
| ⊗ LSCI2351  | Master thesis support seminar                         | Myriam De Kesel<br>Gabriel Dias de<br>Carvalho Junior<br>Laure Ninove | FR [q1+q2] [22.5h+22.5h] [3 Credits] |  | X |
| ⊗ LEISS2903 | Master's thesis support seminar                       |   | FR [q1+q2] [22.5h+22.5h] [3 Credits] |  | X |
| ⊗ LEISS2904 | Séminaire transversal d'accompagnement du mémoire - 2 |   | FR [q1+q2] [22.5h+22.5h] [3 Credits] |  | X |

**o Maîtrise de la langue française**

## Une épreuve liminaire de maîtrise de la langue française (EMLF) devra être présentée par les étudiants inscrits en master en enseignement (section 4 et section 5). Cet examen OBLIGATOIRE est généralement organisé le 3e mardi d'octobre. Le seuil de réussite de l'examen est fixé à 10/20. En cas d'échec, l'étudiant.e se verra ajouter à son PAE une UE de 5 crédits portant sur la maîtrise de la langue française. Il ne pourra en aucun cas être diplômé si cette UE n'est pas réussie. Inscription à l'épreuve liminaire via la plateforme de l'EMLF. [Pour plus d'information](#)

From 0 to 5credit(s)

|             |   |  |                                  |  |   |
|-------------|---|--|----------------------------------|--|---|
| o LEISS2207 | French language mastery for teaching<br>L'UE sera retirée du programme annuel de l'étudiant en cas de réussite de l'épreuve liminaire |  | FR [q2] [37.5h+7.5h] [5 Credits] |  | X |
|-------------|---|--|----------------------------------|--|---|

## Supplementary classes

**To access this Master, students must have a good command of certain subjects. If this is not the case, in the first annual block of their Masters programme, students must take supplementary classes chosen by the faculty to satisfy course prerequisites.**

- Mandatory
- ⊗ Optional
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- ⊙ Not offered in 2026-2027 but offered the following year
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- Activity with requisites
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- (FR) Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

|             |  |  |  |
|-------------|--|--|--|
| ⊗ LPHY1101  | <a href="#">Physics 1</a>  | Michel Crucifix<br>Thierry Fichetef                      | FR [q1] [32h+46h] [6 Credits] 🌐                      |
| ⊗ LPHY1103  | <a href="#">Additional physics</a>   | Gabriel Dias de<br>Carvalho Junior<br>Matthieu Génévriez | FR [q2] [40h+10h] [4 Credits] 🌐                      |
| ⊗ LCHM1111B | <a href="#">General chemistry</a>  |  | FR [q1] [45h+45h] [8 Credits] 🌐                      |
| ⊗ LCHM1141B | <a href="#">Organic chemistry</a>  |  | FR [q2] [30h+30h] [6 Credits] 🌐                      |
| ⊗ LCHM1242  | <a href="#">Bio-organic chemistry</a>  | Benjamin Elias<br>Patrice Soumillion                     | FR [q1] [30h+10h] [3 Credits] 🌐                      |
| ⊗ LCHM1271A | <a href="#">Elements of biochemistry</a>   |  | FR [q1] [30h+20h] [3 Credits] 🌐                      |
| ⊗ LBIO1110  | <a href="#">Life : diversity and evolution</a>   | Patrick Dumont<br>François Renoz                         | FR [q1] [30h+10h] [4 Credits] 🌐                      |
| ⊗ LBIO1111  | <a href="#">Cell and molecular biology</a>   | Patrick Dumont<br>Charles Hachez                         | FR [q1] [30h+20h] [5 Credits] 🌐                      |
| ⊗ LBIO1112  | <a href="#">Organism biology : plants and animals</a>  | Muriel Quinet<br>Jean-François Rees                      | FR [q2] [30h+30h] [6 Credits] 🌐                      |
| ⊗ LBIO1116  | <a href="#">Scientific approach in biology</a>   | Muriel Quinet<br>Nicolas Schtickzelle                    | FR [q2] [30h+30h] [4 Credits] 🌐                      |
| ⊗ LBIO1117  | <a href="#">Ecology I</a>  | Renate Wesselingh  | FR [q2] [30h+10h] [4 Credits] 🌐                      |
| ⊗ LBIO1217  | <a href="#">Ecology II</a>   |  | EN [q2] [30h+10h] [3 Credits] 🌐<br>> French-friendly |
| ⊗ LBIO1223  | <a href="#">Molecular biology</a>  | Corentin Claeys<br>Bouaert<br>Bernard Hallet             | FR [q2] [50h+20h] [6 Credits] 🌐                      |
| ⊗ LBIO1235  | <a href="#">General cell physiology</a>  | Stanley Lutts<br>Jean-François Rees                      | FR [q1] [15h+15h] [2 Credits] 🌐                      |
| ⊗ LBIO1310  | <a href="#">Biological evolution</a>   | Simon Baeckens<br>François Renoz<br>René Rezsohazy       | FR [q2] [30h+10h] [3 Credits] 🌐                      |
| ⊗ LBIO1330  | <a href="#">Integrated animal biology : reproduction and development</a>                     | Patrick Dumont<br>René Rezsohazy                         | FR [q1] [30h+10h] [3 Credits] 🌐                      |
| ⊗ LBIO1333  | <a href="#">Integrated animal biology: circulation, respiration, digestion and excretion</a> | Patrick Dumont<br>Françoise Gofflot<br>René Rezsohazy    | FR [q2] [30h+10h] [3 Credits] 🌐                      |
| ⊗ LBIO1355  | <a href="#">Speciation : origin of biodiversity</a>  | Simon Baeckens<br>Renate Wesselingh                      | FR [q1] [20h+10h] [2 Credits] 🌐                      |
| ⊗ LBIO1121  | <a href="#">Genetics</a>   | Charles Hachez   | FR [q2] [20h+15h] [2 Credits] 🌐                      |



## Course prerequisites

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There are no prerequisites between course units (CUs) for this programme, i.e. the programme activity (course unit, CU) whose learning outcomes are to be certified and the corresponding credits awarded by the jury before registration in another CU.

## The programme's courses and learning outcomes

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For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

## BIOL2M4 - Information

### Access Requirements

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#### SUMMARY

- > [General access requirements](#)
- > [Specific access requirements](#)
- > [University Bachelors](#)
- > [Non university Bachelors](#)
- > [Holders of a 2nd cycle University degree](#)
- > [Access based on validation of professional experience](#)
- > [Access based on application](#)
- > [Admission and Enrolment Procedures for general registration](#)

### University Bachelors

| Diploma   | Special Requirements | Access                                      | Remarks |
|---|----------------------|---|---------|
| <b>UCLouvain Bachelors</b>  |                      |   |         |
|   |                      | Direct access                               |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | <a href="#">Access based on application</a> |         |
|   |                      | <a href="#">Access based on application</a> |         |
|   |                      | <a href="#">Access based on application</a> |         |
|   |                      | <a href="#">Access based on application</a> |         |
| <b>Others Bachelors of the French speaking Community of Belgium</b> |                      |   |         |
|   |                      | Direct access                               |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | Access with additional training             |         |
|   |                      | <a href="#">Access based on application</a> |         |
|   |                      | <a href="#">Access based on application</a> |         |
|   |                      | <a href="#">Access based on application</a> |         |
| <b>Bachelors of the Dutch speaking Community of Belgium</b>         |                      |   |         |
| <b>Foreign Bachelors</b>  |                      |   |         |

### Non university Bachelors

**Holders of a 2nd cycle University degree**

| Diploma     | Special Requirements | Access | Remarks |
|-------------|----------------------|--------|---------|
| "Licenciés" |                      |        |         |

**Masters**

**Access based on validation of professional experience**

**Access based on application**

**Admission and Enrolment Procedures for general registration**

## Evaluation

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***The evaluation methods comply with the [Academic regulations and procedures](#). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".***

