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**Introduction**

**Description:**
The objective of this Advanced Master in Public Health Methodology is to provide a large degree of autonomy in the use of public health methods. The programme is addressed to public health professionals, health managers, who work at different levels of the health system, with a view to providing them with a specific skills needed for health system management and development of analytical and specialized approaches to strengthen their action strategies (operational research, health planning, health services research, health strategies and management). The targeted skills aim at the achievement of an overall objective which is to: "ensure methodological approaches and public health decision-makings, consistent with the needs of people, communities and individuals." This Advanced Master thus highlights the methodologies of analysis and investigation of major health issues in developing countries and in a global health approach. It also intends to give to the students a sufficient basis for a systemic understanding of health issues as well as contextual and environmental factors that determine the answers to them. By the variety of teaching methods and by the commitment of teachers and students, this Advanced Master will enable health professionals to specialize in the aspects of the fight against disease and for a better health (epidemiology and biostatistics), organization and policy, systems and health services management (health economics aspects, management, health planning and operational research) as well as the development of social approaches to health and transversal skills such as research methodology, scientific writing and capitalization of public health actions.

**Training content**
This 60 ECTS programme, which covers different methodological aspects, is composed of a compulsory part (50 ECTS) and an optional part (30 ECTS are proposed and the student must choose at least 10 - with a maximum of 25).

The compulsory part of the program counts for 50 ECTS:
- Biostatistics and epidemiology
- Qualitative methods and contextual factors in public health
- Health economics and quality management
- Planning and health system research and management
- Operational research and south lectures
- Master Thesis

The several optional teaching units are related to:
- Health information system, interview and questionnaire surveys
- Advanced methods in biostatistics and epidemiology
- The WHO strategy for incorporation of traditional medicine in healthcare
- Special research questions in public health
- Special research question in emergency situations
- Interdisciplinary seminars in translational medicine

**Your profile**
This Advanced Master is open to a wide range of practitioners (public health executives, medical doctors, health economists, research workers in the biomedical sector, etc.).

This course is an Advanced Master degree which means a master subsequent to a previous master. Therefore the general admission requirement for the course is that the applicants must possess a diploma at least equivalent to a master degree (5 years of university education).

To be admitted, applicants must bear a 2nd cycle degree considered equivalent to 300 credits (minimum 5 years of study) by the Jury. If the degree represents only 240 credits (minimum 4 years of study), the candidate should have acquired 60 extra credits through other 2nd cycle studies or through some form of specialization, or must prove to have acquired the useful knowledge through personal or professional experience.
MPHM2MC - Teaching profile

Learning outcomes

Programme structure

> Common part [en-prog-2017-mphm2mc-wmphm100t.html]
> Optional modules [en-prog-2017-mphm2mc-wmphm108o.html]

MPHM2MC Detailed programme

Programme by subject

CORE COURSES [50.0]

○ Mandatory
△ Courses not taught during 2017-2018
◎ Periodic courses taught during 2017-2018
Activity with requisites

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

○ Thesis (15 credits)
Les 3 activités sont organisées à l'ULB

- WMPHM2500 Seminars of epidemiological methods Katia Castelbon 24h 5 Credits 2q
- WMPHM2501 Practice of biostatistics in public health Fati Kirakoya 24h 5 Credits 2q
- WMPHM2200 Integration of statistical and epidemiological methods Annie Robert 24h 5 Credits 2q

○ Biostatistics in public health (10 credits)
Les 4 activités sont organisées à l'ULB

- WMPHM2502 Programming elements for data analysis Christelle Senterre 12h 1 Credits 1q
- WMPHM2503 Biostatistics in public health: univariate analysis Fati Kirakoya 24h+24h 4 Credits 1q
- WMPHM2504 Biostatistics in public health: multivariate analysis Christelle Senterre 12h+12h 3 Credits 2q
- WMPHM2505 Sampling methods: theory and practice Fati Kirakoya 12h 2 Credits 2q

○ Epidemiology (5 credits)
Les 2 activités sont organisées à l'ULB

- WMPHM2201 Epidemiological methods Séverine Henrard 12h+12h 3 Credits 1q
- WMPHM2202 Clinical epidemiology Jean-Marie Degryse 12h 2 Credits 1q
### Qualitative methods and contextual factors in public health (5 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2506</td>
<td>Qualitative methods: data collection and analysis</td>
<td>3</td>
<td>12h+12h</td>
<td>2q</td>
</tr>
<tr>
<td>WMPHM2507</td>
<td>Contextual factors in public health</td>
<td>2</td>
<td>12h+0h</td>
<td>2q</td>
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</table>

### Health economics & Quality management (5 credits)

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<th>Hours</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2506</td>
<td>Health economics</td>
<td>2</td>
<td>20h</td>
<td>2q</td>
</tr>
<tr>
<td>WMPHM2507</td>
<td>Quality management and risk in healthcare facilities</td>
<td>3</td>
<td>24h</td>
<td>2q</td>
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### Operational research and South Lectures (5 credits)

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<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2508</td>
<td>Planning of operational research</td>
<td>2</td>
<td>12h</td>
<td>2q</td>
</tr>
<tr>
<td>WMPHM2509</td>
<td>Health services, strategies and evaluation</td>
<td>2</td>
<td>12h</td>
<td>2q</td>
</tr>
<tr>
<td>WMPHM2510</td>
<td>South lectures</td>
<td>1</td>
<td>12h</td>
<td>2q</td>
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### Planning and health system research & management (5 credits)

<table>
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<th>Hours</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2602</td>
<td>Health system management and strengthening</td>
<td>2</td>
<td>12h+12h</td>
<td>1q</td>
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<tr>
<td>WMPHM2603</td>
<td>Hospital management</td>
<td>2</td>
<td>12h+12h</td>
<td>1q</td>
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<tr>
<td>WMPHM2605</td>
<td>Principles of management and human relation management</td>
<td>1</td>
<td>12h+0h</td>
<td>1q</td>
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</table>
**Optional modules [10.0]**

- **Mandatory**
- **Optional**
- **Courses not taught during 2017-2018**
- **Periodic courses not taught during 2017-2018**
- **Periodic courses taught during 2017-2018**
- **Activity with requisites**

**Optional ECTS - Minimum 10, maximum 25 (to obtain 75 ECTS on the whole)**

**Health surveys research (5 credits)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2511</td>
<td>Protocol design and development and health examination survey (ULB)</td>
<td>Katia Castelbon Isabelle Godin</td>
<td>3 Credits</td>
<td>1q</td>
</tr>
<tr>
<td>WFSP2202P</td>
<td>Health survey methods</td>
<td>Lydia Gisele</td>
<td>2 Credits</td>
<td>1q</td>
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</tbody>
</table>

**The WHO Strategy for incorporation of traditional medicine in healthcare (5 credits)**

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<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2604</td>
<td>The who strategy for incorporation of Traditional Medicine in healthcare</td>
<td>Pierre Duez</td>
<td>5 Credits</td>
<td>1q</td>
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</tbody>
</table>

**Advanced methods in biostatistics and epidemiology (5 credits)**

<table>
<thead>
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<th>Title</th>
<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFSP2238P</td>
<td>Advanced epidemiology (UCL)</td>
<td></td>
<td>4 Credits</td>
<td>2q</td>
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<tr>
<td>WMPHM2512</td>
<td>Advanced biostatistic: meta-analysis</td>
<td>Fati Kirakoya</td>
<td>1 Credits</td>
<td>2q</td>
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</tbody>
</table>

**Special research questions in public health (5 credits)**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2203</td>
<td>Clinical trials and vaccine development studies: phases I to IV, plus survival analysis with Cox regression</td>
<td>Annie Robert</td>
<td>3 Credits</td>
<td>1q</td>
</tr>
<tr>
<td>WMPHM2204</td>
<td>Impact of environment on health in developing countries with disease mapping and multilevel analysis methods</td>
<td>Sophie Vanwambeke</td>
<td>2 Credits</td>
<td>1q</td>
</tr>
</tbody>
</table>

**Special research questions in emergency situations (5 credits)**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2205</td>
<td>Clinimetrics: scales and instrumental variables to measure health outcomes</td>
<td>Jean-Marie Degryse</td>
<td>3 Credits</td>
<td>2q</td>
</tr>
<tr>
<td>WMPHM2206</td>
<td>Applications of epidemiological methods in post conflict and disaster settings</td>
<td>Debarati Guha</td>
<td>2 Credits</td>
<td>2q</td>
</tr>
</tbody>
</table>

**Interdisciplinary seminars in translational medicine (5 credits)**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Instructor</th>
<th>Credits</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMPHM2513</td>
<td>Interdisciplinary seminars in translational medicine (ULB)</td>
<td>Samia Laokri</td>
<td>5 Credits</td>
<td>2q</td>
</tr>
</tbody>
</table>
The programme's courses and learning outcomes

For each UCL training programme, a reference framework of learning outcomes specifies the competences expected of every graduate on completion of the programme. You can see the contribution of each teaching unit to the programme's reference framework of learning outcomes in the document "In which teaching units are the competences and learning outcomes in the programme's reference framework developed and mastered by the student?"

The document is available by clicking this link after being authenticated with UCL account.
Admission

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies. The admission requirements must be met prior to enrolment in the University.

General requirements

Subject to the general requirements laid down by the academic authorities, admission to the specialized Master’s degree programme will be granted to students who fulfil the entry requirements for studies leading to the award of a Master’s (second-cycle) degree and who hold a second-cycle diploma, degree, certificate or other qualification issued within or outside the French Community of Belgium, or whose prior learning or experience has been accredited by the Examination Board as being equivalent to at least 300 credits.
Teaching method

Evaluation

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading “Learning outcomes evaluation method”.

Mobility and/or Internationalisation outlook

Possible trainings at the end of the programme

Certificates

Contacts