

## Short description of Modules MPH - Year 1 for 2017-2018

Module #	Module title	Coordinator	Contents	ECTS #	Period of teaching, weeks
101	<b>Cross-disciplinary module: "Introduction to Global health"</b>	Florence BODEAU-LIVINEC	<p><b>Introduction to Global health</b></p> <p>This course will introduce students to global health to enable them to recognize the main burden of diseases affecting both developed and developing countries, and to understand how they affect their population. Lectures and tutorials will explore (1) the burden of diseases; (2) migrations of health care professionals and patients (3) how countries financed their health system; (4) inequalities in local, national, and global contexts.</p> <p>Case studies based on the literature and the work of faculty members will be used to illustrate the real-world application of these tools and methods to address public health problems.</p> <p><b>Learning objectives:</b> Students who successfully complete this course will be able to:</p> <ol style="list-style-type: none"> <li>1. Describe the burden of diseases</li> <li>2. Critically appraise and interpret the findings of global health papers</li> </ol>	3	37,38, 2017
105 106 107	<b>Epidemiology</b>	Emilie COUNIL	<p><b>Epidemiology</b></p> <p>The modules will cover the variety of epidemiologic approaches, address the summary measures of disease frequency and will introduce useful concepts for epidemiological literature critical reading as well for designing an epidemiological study, e.g. exposure assessment, case ascertainment, bias and confounding; Epidemiology &amp; Biostats courses and applications are combined at some stages</p> <p><b>Learning objectives:</b> at the end of the module, the students should be able to:</p> <ol style="list-style-type: none"> <li>1. Identify key concepts in epidemiology</li> <li>2. Discuss the appropriate design for investigating an epidemiologic question</li> <li>3. Read critically an epidemiologic paper</li> </ol> <p><b>Course format</b></p> <p>Students will manipulate epidemiologic data for two days and will spend significant amount of time in working groups. Students will be provided with material to read prior to each lecture, e.g. abstracted from the Center for the Disease &amp; Control "Principles of Epidemiology</p> <p>Conferences will be given by invited scientist at least once a week .</p>	10.5	39,40 2017 45,46 2017 49,50 2017 5, 6,7 2018

<p>111 112 113</p>	<p><b>Information Sciences and Biostatistics</b></p>	<p><b>Nolwenn LE MEUR</b></p>	<p><b>Information Sciences and Biostatistics</b> The main objective of this program is to give methodological keys to comprehend quantitatively a public health problem. More precisely, this course covers the basic tools for the collection, analysis, and presentation of data. Topics covered include: Statistical descriptive analysis, Hypothesis testing: methods for comparison of categorical, discrete and continuous data Univariate and multivariate linear regressions. Biostats &amp; Epidemiology courses are be combined at some stages.</p> <p><b>Learning objectives:</b> <i>at the end of the module, the students should be able to:</i></p> <ol style="list-style-type: none"> <li>1. Conduct preliminary/simple statistical analysis</li> <li>2. Apply statistical methods and tools to public health issues</li> <li>3. Read critically an article/report dealing with notions of biostatistics</li> <li>4. Describe &amp; interpret relation between statistics</li> </ol> <p><b>Course format</b></p> <p>Each methodological course is followed by an application including exercises, cases study, articles/report discussion and data analysis on computers using EXCEL STATA R software. Applications cover different public health topics.</p>	<p>10,5</p>	<p>39,40 2017 45,46 2017 49,50 2017 05, 06 07,2018</p>
<p>102 103 104</p>	<p><b>Social and behavioral sciences in public health</b></p>	<p><b>Jean-Baptiste COMBES &amp; Suzanne MAMAN</b></p>	<p><b>Social and behavioral sciences in public health</b> The modules devoted to behavioral and social sciences in public health addresses the cognitive, behavioral, social and cultural factors related to individual and population health and health disparities. Research and practice in this area contributes to the development, administration and evaluation of programs and policies in public health and health services to promote and sustain healthy environments and healthy lives for individuals and populations.</p> <p><b>Learning objectives:</b> <i>at the end of the module, the students should be able to:</i></p> <ol style="list-style-type: none"> <li>1. Identify basic theories, concepts and models from a range of social and behavioural disciplines that are used in public health research and practice.</li> <li>2. Recognize the causes and nature of social and behavioural factors that affect health of individuals and populations.</li> <li>3. Identify critical stakeholders (individuals, organizations and community), steps and procedures for the planning, implementation and evaluation of public health programs, policies and interventions.</li> </ol> <p><b>Course format</b></p> <p>Sessions will be alternatively lecture and small group discussion and activities/computer labs, reading. In some sessions, students are asked for discussing one or two of the key readings for the week. During small group learning activities students are required to integrating materials from sessions or previous readings or works made during weeks with no face to face courses.</p>	<p>10,5</p>	<p>41,42, 2017 47,48, 2017 01, 02,2018</p>

<p>108 109 110</p>	<p>Management and health policy sciences</p>	<p>Suzanne BABICH</p>	<p><b>Management and health policy sciences</b> The modules "management and health policy" provides students with an understanding of the issues of managing health system and organizations. The health policy part examines health care systems and the policy process, with an emphasis on the role of the different stakeholders (the state, the medical profession, patient organizations). It uses a comparative approach and presents several examples of health care systems to illustrate the health policy process. The second part of this module will provide basic understanding of health care management and organizational dynamics, including how organization relates to their environment, organization design, the managerial role, leadership, communication and power and strategy</p> <p><b>Learning objectives:</b> at the end of the module, the students should be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the main components and issues of the organization &amp; management of health systems</li> <li>2. Critically assess changes and reforms currently implemented in the systems</li> <li>3. Differentiate stakeholders at the national, regional and local levels and describe their role</li> <li>4. Analyse different types of management for health care organizations</li> <li>5. Measure the impact of health organizations on health outcomes</li> <li>6. Develop program action through logic models</li> </ol> <p><b>Course format</b></p> <p>Some class lectures will be a combination of lectures &amp; discussions. In addition group works will focus on health systems and policies of students 'choices and group presentation will be held a part of the grading system</p>	<p>10.5</p>	<p>43,44, 2017 03,04, 2018 11, 12, 2018</p>
<p>114 115 116</p>	<p>Environmental and occupational health sciences</p>	<p>Bertrand LEFEBVRE</p>	<p><b>Environmental and occupational health sciences</b> The impact of some environmental factors on public health is known since the Minamata disaster or Rachel Carlson's book on pesticides ("Silent spring"). From the early 60's up to now, the interrelations between environmental or occupational problems and politics and health of populations have been increasing. They are often complex and unforeseeable. The aim of this module is to analyse and understand (i) the interdisciplinary context of public health challenges of environmental or occupational origin, (ii) the main environmental or occupational risk factors for public health and the corresponding issues (iii) the weight of related uncertainty in a changing context (climate, spatiotemporal variability, globalization, threats...).</p> <p><b>Learning objectives:</b> at the end of the module, the students should be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the processes of environmental contamination, pollution transfers and exposures</li> <li>2. Critically assess papers on environmental epidemiology and risk assessment</li> <li>3. Identify and treat health problems with an environmental and occupational exposures component</li> <li>4. Analyse the most critical health effects associated with globalization and climate change</li> </ol> <p><b>Course Format</b></p> <p>Lectures, case studies and group works are proposed during the modules (9ECTS) where students will be in contact with researchers of high professional experience, a conference closing each period.</p>	<p>9</p>	<p>09,10, 2018 13,14,15, 2018</p>

117	Integrated Module Maternal and Child Health (MCH)	Cheri PIES	<p><b>Maternal and Child Health</b> This one-week intensive course on Maternal and Child Health (MCH) will provide students with an overview and introduction to selected MCH-related issues and includes a focus on the ways in which poverty, politics, and racial and ethnic disparities affect the health of families, women, children and adolescents. Students will be given the opportunity to discuss and examine current issues central t health, review the latest literature on new directions in the field, explore existing data sources and the uses of data to improve maternal and child he ways in which the political context in a given nation/country affects the health and well-being of families.</p> <p><b>"Learning objectives:</b> <i>at the end of the module, the students should be able to:</i></p> <ol style="list-style-type: none"> <li>1. Describe at least six central components to the field of Maternal and Child Health, including pregnancy/prenatal care, infancy, childhood, adol and men's health, preconception/interconception health, and the life course perspective.</li> <li>2. Discuss the ways that politics, poverty, and racial and ethnic disparities affect the health of families, women &amp; children.</li> <li>3. Describe at least three key health issues that have been demonstrated to be central to improving maternal and child health</li> <li>4. Identify and utilize key data sources for maternal and child health measures.</li> </ol> <p><b>Course Format</b> Each day of this one-week class will provide students with an opportunity to discuss the key issues identified for that day. Morning sessions will be lecture and small group discussion and activities. Afternoons will be interactive with small group learning activities designed to assist students in integrating the didactic materials from the morning session.</p>	3	16,17, 2018
120	Language	Matthieu GALINDO Josefina LABORDA Odessa DARIEL	<p>This course will be offered to international students who are not familiar with French, or Spanish (for bilingual students) and, conversely, to French speaking students who want to have a better master of English as the international language of communication. Personal work will complement the class lessons.</p>	3	Over the year Friday