

**Syllabus of the teaching unit “A Primer of Epidemiology”  
(Modules 105, 106, 107)<sup>1</sup>**

<b>Module</b> 105, 106, 107	<b>A Primer of Epidemiology</b>
<b>Coordinator</b>	Dr Florence Bodeau-Livinec, MD, PhD EHESP, Metis department <a href="mailto:Florence.bodeau-livinec@ehesp.fr">Florence.bodeau-livinec@ehesp.fr</a>
<b>Dates</b>	September 2019: 24, 25, 27 October 2019: 01, 04, 11 November 2019: 05, 08, 15 December 2019: 03, 06, 10, 13, 17 January 2020: 28, 31 February 2020: 04, 07, 11, 14
<b>Credits/ECTS</b>	10,5 ECTS
<b>Course format</b>	Readings, lectures, conferences, case studies, homework, group works & field study
<b>Location</b>	EHESP Paris, 20 avenue George Sand, La Plaine Saint-Denis
<b>Description</b>	Lectures, exercises, case studies and group works are proposed. On the occasion of invited conferences, students will be in contact with researchers of high professional experience. A special attention is given to allowing the students to gain experience in field epidemiology, through a real-life survey.
<b>Course learning objectives</b>	Students who successfully complete this course will be able to: <ul style="list-style-type: none"> <li>• understand key concepts in epidemiology;</li> <li>• discuss the appropriate design for investigating an epidemiologic question;</li> <li>• read critically an epidemiology research paper;</li> </ul>

<sup>1</sup>The epidemiology and biostatistics modules are deliberately mixed over time.

<b>Course structure</b>	<p>Most of the time, topics will be studied as follow:</p> <ul style="list-style-type: none"> <li>- The relevant chapter from textbook recommended before the lecture</li> <li>- A lecture</li> <li>- A homework in relation to the topic</li> <li>- A lab in relation to the topic</li> </ul> <p>This will be completed by invited speakers for seminars, case studies and field study (group work).</p> <p>Detail of the sessions:</p> <ol style="list-style-type: none"> <li>1) Introducing epidemiology       <ol style="list-style-type: none"> <li>a. Introduction Epidemiology. F. Bodeau-Livinec:1h30</li> <li>b. Medical Causes of Death. Grégoire Rey (INSERM): 1h30</li> </ol> </li> <li>2) Core methods in epidemiology       <ol style="list-style-type: none"> <li>a. Measures of frequency. Florence Bodeau-Livinec. 3h</li> <li>b. Standardization. Florence Bodeau-Livinec, 3h.</li> <li>c. Surveillance and time series analysis. Pascal Crépey (3h)</li> <li>d. Investigating an outbreak (case study). Nathalie Jourdan-Da Silva: 3h</li> <li>e. Screening. Florence Bodeau-Livinec, 3h</li> <li>f. Study Design. Florence Bodeau-Livinec and Jean-Philippe Régnaux. 9h.</li> <li>g. Measures of association. Florence Bodeau-Livinec, 3h.</li> <li>h. Burden of disease and attributable risk. Emilie Council: 3h</li> <li>i. Bias and confounding. Florence Bodeau-Livinec: 9h</li> </ol> </li> <li>3) Assessing and weighing evidence       <ol style="list-style-type: none"> <li>a. Evidence-based public health, systematic reviews &amp; meta-analysis. Jean-Philippe Régnaux: 3h</li> <li>b. Causality. Olivier Grimaud: 3h</li> </ol> </li> <li>4) Field survey       <ol style="list-style-type: none"> <li>a. Preparation &amp; Conduct. Florence Bodeau-Livinec &amp; Nolwenn Le Meur 12h in total (+complement in the ISB module for data analysis)</li> <li>b. Results (group presentations). Florence Bodeau-Livinec &amp; Nolwenn Le Meur 3h (shared with ISB)</li> </ol> </li> <li>5) Conferences       <ol style="list-style-type: none"> <li>a. Using epidemiology to evaluate health services. Melanie Bertin. 3h.</li> <li>b. Social epidemiology. Mélanie Bertin. 3h</li> </ol> </li> <li>6) Critical reading       <ol style="list-style-type: none"> <li>a. Article presentations. Florence Bodeau-Livinec. 3h</li> <li>b. Epidemiology in mass media. Emilie Council: 3h</li> </ol> </li> <li>7) Review sessions. (9h)</li> </ol>
<b>Readings</b>	<p>The following textbook is recommended:          "Epidemiology" by Leon Gordis.          Chapters from this book may be read before the lecture.</p> <p>Articles may be recommended if relevant for a given lecture.</p>
<b>Course requirement</b>	<p>Reading of selected textbook chapters and papers before the sessions          Preparation of homework and assignments          Involvement in group work          Attendance to all sessions (see overall policy below)          Participation in class discussions</p>

<p><b>Grading and assessment</b></p>	<p>40% final exam (2-hour table individual assignment)  10% quiz (individual)  20% homework (individual)  30% group works (field survey presentation and article presentation)</p> <p>Note also that students may complete a questionnaire that assesses their own and their teammates' contributions to group work for assignments. All team members will receive the same grade except if it is clear that a student has not participated effectively (attended and contributed to meetings; made timely, helpful contributions; been constructive, etc.). In that case, the student's grade will be lowered accordingly.</p>
<p><b>Course policy</b></p>	<p><b>Attendance &amp; punctuality</b></p> <p><b>Regular and punctual class attendance is a prerequisite for receiving credit in a course.</b> Students are expected to attend each class. Attendance will be taken at each class. The obligations of attendance and punctuality cover every aspect of the course: - lectures, conferences, group projects, assessments, examinations, as described in EHESP Academic Regulations <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article. 3).</p> <p>If students are not able to make it to class, they are required to send an email to the instructor and to the MPH program coordinating team explaining their absence prior to the scheduled class date. All supporting documents are provided to the end-of-year panel.</p> <p>Students who miss class are responsible for content. Any student who misses a class has the responsibility for obtaining copies of notes, handouts and assignments. If additional assistance is still necessary, an appointment should be scheduled with the instructor. Class time is not to be used to go over material with students who have missed class.</p> <p><b>Lateness:</b> Students who are more than 10 minutes late may be denied access to a class. Repeated late arrivals may be counted as absences (See <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article. 3 Attendance &amp; Punctuality)</p> <p><b>Maximum absences authorized &amp; penalty otherwise</b>  Above 20% of absences will be designated a fail for a given class. The students will be entitled to be reassessed in any failed component(s). If they undertake a reassessment or they retake a module this means that they cannot normally obtain more than the minimum pass mark (i.e. 10 out of 20)</p> <p><b>Exceptional circumstances</b>  Absence from any examination or test, or late submission of assignments due to illness, psychological problems, or exceptional personal reasons must be justified; otherwise, students will be penalized, as above mentioned. Students must directly notify their professor and the MPH academic secretariat before the exam or before the assignment deadline. Before accepting the student's justification, the professor and the MPH academic secretariat have the right to request either a certificate from the attending physician or from a psychologist, or from any other relevant person (See <a href="http://mph.ehesp.fr">http://mph.ehesp.fr</a> EHESP Academic Regulation Article 4 Examinations).</p> <p><b>Courtesy:</b> <u>All cell phones/pages MUST be turned off during class time.</u>  Students are required to conduct themselves according to professional standards; eating during class time is not permitted during class time, such as course or group work.</p>
<p><b>Valuing diversity</b></p>	<p>Diversity enriches learning. It requires an atmosphere of inclusion and tolerance, which oftentimes challenges our own closely-held ideas, as well as our personal comfort zones. The results, however, create a sense of community and promote excellence in the learning environment. This class will follow principles of inclusion, respect, tolerance, and acceptance that support the values of diversity. Diversity includes consideration of: (1) life experiences, including type, variety, uniqueness, duration, personal values, political viewpoints, and intensity; and (2) factors related to "diversity of presence," including, among others, age, economic circumstances, ethnic identification, family educational attainment, disability, gender, geographic origin, maturity, race, religion, sexual orientation and social position.</p>

<b>Course evaluation</b>	EHESP requests that you complete a course evaluation at the end of the school year. Your responses will be anonymous, with feedback provided in the aggregate. Open-ended comments will be shared with instructors, but not identified with individual students. Your participation in course evaluation is an expectation, since providing constructive feedback is a professional obligation. Feedback is critical, moreover, to improving the quality of our courses, as well as for instructor assessment.
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