

N°207	Integrated module: Research Methods
Coordinator	O. Dariel (EHESP, IDM) odessa.petitdardiel@ehesp.fr
Dates	January 31-February 4, 2022
Credits/ECTS	3 ECTS
Duration or Course Format	5 days of 6 hours = 30 hours
Location	EHESP 20 Avenue George Sand 93210 LA PLAINE ST DENIS
Description	This module aims to provide an overview of public health research methods to prepare students for the design of their frameworks and writing of their thesis. Topics will include the building of an evidence-based argument to justify research questions/objectives, collecting and analyzing primary data. Content on quantitative and qualitative research methods covered in years 1 and 2 will be reviewed, and new research techniques, such as systematic reviews and other literature reviews will be covered.
Prerequisites	None
Course learning objectives	<p>The broad aim of this module is to provide students with the skills to conduct research independently and critically appraise existing research. More specifically, students should be able to:</p> <ul style="list-style-type: none"> ● Describe and explain the key concepts and processes required for rigorous public health research ● Develop a critical understanding of the strengths and limitations of quantitative and qualitative research methods and techniques ● Develop a research proposal to address a public health problem ● Locate, organize, analyze, synthesize and evaluate information
Contributes to the development of the following competencies	<ul style="list-style-type: none"> ● Knows how to retrieve, analyze and appraise evidence from all data sources to support decision making ● Designs and conducts qualitative and/or quantitative research that builds on existing evidence and adds to the evidence base for public health practice, involving relevant stakeholders in this process <p><i>From the WHO-ASPHER Competency Framework for the Public Health Workforce in the European Region (2020)</i></p>
Structure	See below
Resources	<p>Crosby, R. A., & Salazar, L. F. (2020). <i>Essentials of public health research methods</i>. Jones & Bartlett Learning.</p> <p>Howlett, B. (2013). <i>Healthcare research methods. Evidence-Based Practice for Health Professionals</i>; Jones and Bartlett Learning: Burlington, MA, USA, 2013, 31-51.</p> <p>Online self-study modules on academic writing: https://researchwriting.unl.edu/</p>

Course requirement	Students are expected to attend all lectures and seminars. Class attendance will be checked accordingly. Students are expected to read and analyse selected papers for the group work before the courses.
Grading and assessment	Class assessment: Thesis framework due 3-4 weeks following the start of the internship (100%)
Course policy	<p>Attendance & punctuality Regular and punctual class attendance is a prerequisite for receiving credit in a course. 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 http://mph.ehesp.fr EHESP Academic Regulation Article. 3). 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>Lateness: Students who are more than 10 minutes late may be denied access to a class. Repeated late arrivals may be counted as absences (See http://mph.ehesp.fr EHESP Academic Regulation Article. 3 Attendance & Punctuality)</p> <p>Maximum absences authorized & penalty otherwise 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>Exceptional circumstances 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 or the MPH academic secretariat before the exam or before the assignment deadline. Before accepting the student's justification, the professor or the MPH academic secretariat has the right to request either a certificate from the attending physician or from a psychologist, or from any other relevant person (See http://mph.ehesp.fr EHESP Academic Regulation Article 4 Examinations).</p> <p>Courtesy: <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>
Valuing diversity	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.
Course evaluation	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.

Session 1 & 2	Introduction to health research: From public health problem to research question & reviewing of the literature
Speakers	Odessa Dariel, Aymery Constant & Library staff
Session Outline	<p><u>Morning: 9-12h</u></p> <ul style="list-style-type: none"> • Introduction to health research • Finding a gap, formulating research questions, hypothesis and/or objectives <p><u>Afternoon: 13h-16h</u></p> <ul style="list-style-type: none"> • Searching the literature • Critical analysis of existing literature • Practical exercises
Learning Objectives	<p>By the end of the two sessions students should be able to:</p> <ul style="list-style-type: none"> - Describe and explain the role of research in public health practice - Locate, organize, analyze, synthesize and evaluate relevant information - Know how to undertake and present a literature review - Know how to develop a research question to address a public health problem
Date & Duration	Monday January 31, 2022 6h
Training methods	Lecture, discussion & group work
Readings	<p>Davies, K. S. (2011). Formulating the evidence based practice question: a review of the frameworks. Evidence Based Library and Information Practice, 6(2), 75-80.</p> <p>Carnwell, R., & Daly, W. (2001). Strategies for the construction of a critical review of the literature. Nurse education in practice, 1(2), 57-63.</p> <p>Murad, M. H., Asi, N., Alsawas, M., & Alahdab, F. (2016). New evidence pyramid. BMJ Evidence-Based Medicine, 21(4), 125-127.</p>

Session 3 & 4	Research design & development of research proposals
Speakers	Odessa Dariel & Aymery Constant
Session Outline	<p><u>Morning: 9-12h & Afternoon: 13h-16h</u></p> <p>Primary data collection & analysis</p> <ul style="list-style-type: none"> • Data collection method & selection of study population • Designing data collection tools (interview & observation guides) • Data analysis

Learning Objectives	By the end of the two sessions students should be able to: - develop an appropriate study plan & study population - choose the most appropriate data collection tools to answer a public health question - understand the basics of analysis of both qualitative and quantitative data
Date & Duration	Tuesday February 1 st , 2022 6h
Training methods	Lecture, discussion & group work
Reading	Howlett, B. (2013). <i>Healthcare research methods. Evidence-Based Practice for Health Professionals</i> ; Jones and Bartlett Learning: Burlington, MA, USA, 2013, 31-51.

Session 5 & 6	Systematic reviews & meta-analyses
Speakers	Nicole Pitcher
Session Outline	<u>Morning</u> : 9-12h <u>Afternoon</u> : 13h-16h
Learning Objectives	By the end of the two sessions students should be able to: 1. Explain what systematic reviews and meta-analyses are, and their purpose 2. Critically appraise protocols of systematic reviews and meta-analyses 3. Develop a protocol for a systematic review and meta-analysis.
Date & Duration	Wednesday February 2 nd , 2022 6h
Training methods	Lecture, individual and group exercises.
Reading	Systematic reviews: CRD's guidance for undertaking reviews in healthcare (https://www.york.ac.uk/media/crd/Systematic_Reviews.pdf - url last checked on 24.03.21) The Cochrane Handbook (https://training.cochrane.org/handbook - url last checked on 24.03.21)

Session 7 & 8	Other types of literature reviews: rapid and scoping reviews
Speakers	Nicole Pitcher
Session Outline	<u>Morning</u> : 9-12h <u>Afternoon</u> : 13h-16h
Learning Objectives	By the end of the two sessions students should be able to 1. Explain what rapid and scoping reviews are, and their purpose 2. Develop a protocol for these types of literature review 3. Critically appraise reports of different types of review.
Date & Duration	Thursday February 3 rd , 2022 6h
Training methods	Lecture, individual and group exercises.
Reading	Rapid Reviews to Strengthen Health Policy and Systems: A Practical Guide Chapter 11 on Scoping Reviews of the Joanna Briggs Institute Manual for Evidence Synthesis

(<https://wiki.jbi.global/display/MANUAL/Chapter+11%3A+Scoping+reviews> – url last checked on 24.03.21)

Session 9 & 10	Academic & Professional communication of data
Speakers	Stephanie Moxley
Session Outline	<u>Morning:</u> 9-12h <u>Afternoon:</u> 13-16h Telling a “story” with data that is ethical, compelling, and effective.
Learning Objectives	By the end of the day students should be able to: <ol style="list-style-type: none"> 1. Define data communication or health data communication. 2. Describe and explain the different reasons WHY health data is communicated. 3. Think strategically about communicating data (thinking through content, audience, purpose, and the “story” that the data will tell). 4. Describe what makes data effective. 5. Be more confident in their ability to communicate data effectively AND visually in different ways. 6. Realize new ways that a MPH degree can be used. 7. Feel inspired on the next steps of pursuing a public health profession!
Date & Duration	Friday February 4 th , 2022 6h
Training methods	Lecture, discussion & group work
Podcasts	Please listen to the following Podcasts: Cole Nussbaumer Knaflic, narrator. “What is Data Visualization?” <i>Storytelling With Data</i> . 22 Feb, 2020. Sujani Siva, narrator. “Why All Public Health Professionals Should Know How To Design An Infographic.” <i>Ph Spotlight: Build Your Public Health Career</i> . Episode 18. 25 August, 2020.