Short Description of Minors and Majors in Social and Behavioural sciences in Public Health track (SBSPH)

Module ≠	Module title	Coordinator	Contents	ECTS #	Teaching Week/year
208	Minor A of the Social and behavioral sciences in public health track « Evaluation of public health programs »	Martine BELLANGER	**Minor A « Evaluation of public health programs »** This course is designed to introduce students to major issues related to assessment of public health strategies, interventions and their impact. The course is recommended for students who have an interest in better understanding how evaluation of public health programs may be used as a tool to set priorities when resources are scarce in both developed and developing countries. These may cover a range of cases from prevention of vector-borne diseases to the introduction of a new drug or a technology as well as influenza vaccination, or improvement of quality of life for senior practicing physical activity. The course will introduce students to some basic measures and sources of data used to study population-based programs or sample-based interventions. The course will also explore some economic and statistical methods that are commonly used to evaluate such strategies and programs. The social & behavioral sciences in public health address social and cultural factors related to individual and population health and health disparities over the life course. Research and practice in this area Contribute to the development, administration and evaluation of programs and policies in public health to promote and sustain healthy environments and healthy lives for individuals and populations *Learning objectives*: at the end of the module, the students should be able to: - Identify the basic concepts that are used to evaluate strategies and programs and valuing health and quality of life - Use appropriate statistical & qualitative techniques to answer empirical questions. - Be able to use and interpret basic measures, including, cost benefit ratio, Quality adjusted life year (QALY), incremental cost effectiveness ratio (ICER), Cost-Benefit rule. - Be able to use mix methods for assessing public health projects/programs - Develop an awareness of contemporary social and contextual issues as they are covered in the press and on the internet (e.g. vaccination, prevention, prevention of environmental exposures). - Make connections between evaluation, social consequences and policy implications. **Prerequisite** Core curriculum in Social and Behavioral sciences and in biostatistics of MPH1 and intermediate modules of SBSPH	3	46, 2018
209	Minor B of the Social and behavioral sciences in public health track « Health promotion and health education"	Eric BRETON	**Minor B « Health promotion and health education»** This module is devoted to furthering a scientific understanding of social, environmental and individual determinants as they affect health status and quality of life. It also examines the processes of planning, implementing, managing, and assessing health education and promotion interventions. It encompasses empirical research, case studies, program evaluations, literature reviews, and discussions of theories of health behaviour and health status, as well as strategies to improve health interventions that could reduce disease or accident-related risks by modifying health care services, physical environments, health beliefs, attitudes, or behaviours. *Learning objectives*: at the end of the module, the students should be able to: 1. Identify basic theories, concepts and models from a range of social and behavioural disciplines that are used in health education and promotion. 2. Describe steps and procedures for the planning, implementation and evaluation of health promotion and education programs and interventions. 3. Specify multiple targets and levels of intervention for health promotion and education programs. 4. Use evidence-based approaches in the development and evaluation of health promotion and education programs	3	47, 2018

220	**Major A of the Social and behavioral sciences in public health track: « Decision analysis in public health"**	**Pauline Chauvin**	**Major A Decision analysis in Public Health** The course provides an introduction to methods and applications of decision analysis and cost-effectiveness in medical decision making. Both lectures and workshop/lab sessions will review basic principles of decision analysis and will be organized into a number of units including: Fundamentals of Building Decision Models,, Assessment of Patient Values and Quality of Life, Bayes' Rule and ROC Analysis, Deterministic Sensitivity Analysis, Fundamentals of Cost-Effectiveness Analysis *Learning objectives*: Through lectures, hands-on computer lab exercises, readings, discussions, and course projects participants will be able to: 1. Demonstrate the ability to critically appraise and interpret decision and cost-effectiveness analyses published in the literature.. 2. Perform a "fold-back" of simple decision trees to calculate the expected utility of each strategy and explain which strategy is "best." 3. Develop decision analytic models capturing diagnostic and/or treatment issues in clinical medicine or within other relevant area of professional practice (e.g., environmental sciences, public health and policy). 4. Use probability theory and Bayes' Rule to interpret the meaning of diagnostic test results (e.g., true positives, false negatives, true negatives, false positives) 5. Describe the relationship between the positivity criterion (or cutoff) used to interpret a diagnostic test result and the operating point on the ROC curve. 6. Demonstrate ability to interpret one-way, two-way, and three-way deterministic sensitivity analyses. 7. Describe the differences between types of Markov models, including Markov Chains, Markov Cohort Simulations, and First Order Monte Carlo Markov models **Lab Sessions:** Computer-based exercises will be used during the workshops, using decisionn modeling software [Decision Maker for Windows - WinDM®], and Excel® spreadsheets..	3	50, 2018
221	**Major B of the Social and behavioral sciences in public health track: « Aging, long term care and chronic disease»**	**Martine BELLANGER**	**Module 221 Major A « Aging, long term care and chronic disease»** This module is based on evidence that chronic diseases have become a major public health concern not only in both high and low income countries.. Although we recognize that efforts have been made to tackle this problem in terms of medical and social care, improvement is still needed in terms of life-long prevention. This course focuses on social, organisational and behavioural approaches and methods in order to provide a good understanding of the public health issues involved.. A comprehensive and integrated approach in terms of the 'long term care model' forms the thread running through the course. Particular attention is given to interactions between various health and social professionals, between hospitals and nursing homes, as well as to interactions between informal resources and formal resources. *Learning objectives: at the end of the module, the students should be able to:* 1. Identify organizational and behavioural approaches involved in public health prevention, intervention & programs for chronic diseases and LT care 2. Discuss the role of different stakeholders in the planning and implementation of policies and programs tackling chronic and long term care issues 3. Use advanced qualitative and quantitative methods to evaluate interventions related to people with chronic conditions such as Alzheimer disease and cancer 4. Use 'long term care models' to provide interventions based on cooperation between professionals, services and informal caregivers. 5. Contribute to effective public health programs in the domain of aging, LT and chronic diseases	3	4, 2019

| 239 | Major D of the Social and behavioral sciences in public health track: "Health promotion and disease prevention program and policy planning" | Eric BRETON | Module 239 Major D "Health promotion and disease prevention program and policy planning"

Public health being a democratic enterprise that aims to improve health for all, this should be reflected in all stages of the planning process: from population need assessment to evaluation of the program or policy. As opposed to interventions restricted to the clinical setting, primary disease prevention and health promotion programs are targeting broad and open systems of actors that leave little control over the implementation processes and over the conditions under which efforts are carried out. In this module, students will therefore be introduced to the knowledge and skills of real-life public health program and policy planning. Although, the approaches covered will be first assessed according to their potential impact on health and well-being, equity and participation of the population will be the two core dimensions guiding their appraisal.

Learning objectives: at the end of the module, the students should be able to:
1 Identify the key parameters and resources guiding program and policy planning
2 Describe the different phases of program and policy planning
3 Use scientific evidence for proper planning
4 Identify strategies to foster participation of the population at all stages of the planning process
5 Analyse and work on the conditions securing sound inequity-proof program planning | 3 | 3, 2019 |