First year courses

Bachelor EPH Year 1

Fac. Health, Medicine and Life Sciences

Health, Health Determinants and the European Union

Full course description

This course serves as an introduction to the BEPH curriculum and will lay the foundation for all upcoming courses.

In Part I of this course, you will be introduced to studying in an academic environment, the Problem Based Learning (PBL) system, the library, the structure and content of the EPH programme and the Specialized Competency Lines (SCLs). For a description of these SCLs, we refer to course EPH1221. You will study the many dimensions and complexity of the concept of health, and you will learn and reflect on how health has been defined within various traditions (WHO, positive health) and over time. You will also elaborate on the concepts 'public' and 'European', in order to find out more about what it means to study EPH.

In Part II of the course, you will study various determinants of health on various levels, and the most influential models in this regard. You will also be introduced to the phenomenon of health inequalities. Health is not equally divided among the population and you will study types and possible causes of socioeconomic and other health inequalities.

In Part III, the course departs into a focus on the European Union. This portion of the course addresses issues such as the history of the EU, the main purpose of the EU (economic), the EU treaties and the Charter of Fundamental Rights of the EU, the EU institutions (European Commission, European Parliament, Council), and the decision making processes on EU level. In order to understand public health issues and policies in Europe, it is essential that you have an understanding of the functioning of the EU and EU legislation. You will also reflect on several ethical issues and dilemmas that come into play when thinking about public health in Europe. During this part of the course you will participate in an excursion to the EU quarter in Brussels.

Course objectives

Below is an overview of the most important Intended Learning Ooutcomes (ILOs) of this course:

Expert

By the end of the course, students should be able to:

- Describe the concepts of health, public health and diverse definitions of health
- Define and reflect on (European) public health as a domain
- Distinguish between public health and (medical approaches to) health care
- Describe patterns of socioeconomic and other inequalities in health

- Describe (influential models of) factors that determine health
- Identify and describe the history, organs and major legal structures and processes of the EU
- Describe the Treaties of the EU and how public health is addressed in these treaties

Investigator

By the end of the course, students should be able to:

- Recall fundamental principles of research ethics and integrity
- Describe the ways in which research forms the basis for public health activity

Communicator

By the end of the course, students should be able (on a basic level) to:

- Discuss topics and findings in English (aiming for level B2)
- Demonstrate understanding of feedback from teachers and peers

Professional

By the end of the course, students should be able to:

- Understand and describe the problem-based learning approach
- Contribute actively and positively in tutor groups and training groups
- Behave in a respectful, professional and reliable manner in tutor groups and group work

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1021 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>I. Houkes</u>

Teaching methods:

Assignment(s), Lecture(s), Work in subgroups, PBL, Training(s), Working visit(s) Assessment methods: Attendance, Participation, Written exam, Assignment Keywords: Health (European) public health Health inequalities Socia economic inequalities Heal

Health (European) public health Health inequalities Socio-economic inequalities Health determinants European Union Treaty of the European Union Ethical issues Problem Based Learning Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 1

Full course description

Course EPH1221 includes the Specialized Competency Lines (SCLs) Research Methodology, Statistics, Epidemiology and Policy Advocacy as taught in period 1. This SCLs are interwoven with the main course EPH1021 Health, Health Determinants and the European Union. For a description of this main course we refer to EPH1021. SCLs are longitudinal, cumulative learning lines, reflecting thematically focused bundles of (portions of) competencies to be achieved. The following five SCLs are interwoven throughout the programme: Research Methodology, Statistics, Epidemiology, Philosophy of Public Health and Policy Advocacy. Students will be introduced to all SCLs in period 1. For a description of the SCL Philosophy of Public Health in periods 1 and 2, please consult course EPH1241. As regards the SCL Methodology, students will be introduced into research methodology and the link between the SCLs Methodology, Epidemiology and Statistics. They will further be trained in the critical appraisal of a research problem. As regards the SCL Epidemiology, students will be introduced into the field of epidemiology and trained in measuring health and disease and associated factors. As regards the SCL Statistics, students will be introduced into statistical thinking and the topics 'What are statistics and for which purposes are they applied?' and 'Meaning and value of "measuring"'. As regards the SCL Policy Advocacy, students will be introduced into the concept of policy advocacy. As students develop an understanding of what health is, and what may determine health, it will become clear that public policy plays a major role in public health outcomes. Not only do public policies define many if not most aspects of the healthcare sector, but public policies also have an influence on all aspects of our living, work, and public environments. Therefore, as public health professionals, it is important that students develop skills in understanding, critiquing, and influencing public policies.

Course objectives

Below is an overview of the most important Intended Learning Outcomes of this course:

Expert

By the end of the course, students should be able to:

- Identify key health indicators and extract such indicators from scientific literature
- Identify key examples of public health policy and programmes in Europe: describe the Treaties of the EU and how public health is addressed in these treaties

Investigator

By the end of the course, students should be able to:

- Summarize the empirical cycle, in particular phase 1 "Formulating a research problem"
- Assess scientific research and publications at a basic level under close supervision
- Describe the ways in which research forms the basis for public health activity
- Explains basic forms of qualitative and quantitative research
- Calculate measures of central tendency and variation
- Make graphical depictions of data and tables summarizing data
- Perform some basic statistical tests

Communicator

By the end of the course, students should be able (on a basic level) to:

- Demonstrate understanding of feedback from teachers and peers
- Poduce limited feedback for peers under supervision

Professional

By the end of the course, students should be able to:

• Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work (both on-campus and online), also in a culturally diverse context

Recommended reading

Bowling, A. (2014). Research methods in health: Investigating health and health services. Maidenhead: Open University Press. McGraw-Hill Education. (E-book) Feak, C.B.& Swales, J.M. (2011). Creating contexts. Writing introductions across genres. Ann Arbor: University of Michigan Press. (Randwyck library Learning and resource center(reference only) SL Q225.5)

EPH1221 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>I. Houkes</u>

Teaching methods:

Assignment(s), Lecture(s), Work in subgroups, Presentations, Research, Skills, Working visit(s) Assessment methods: Assignment, Attendance, Participation Keywords: Research Methodology Epidemiology Statistics Policy Advocacy and Governance Fac. Health, Medicine and Life Sciences

Philosophy of Public Health part 1

Full course description

Please see modules EPH1021 and EPH1022.

Course objectives

Please see modules EPH1021 and EPH1022.

EPH1241 Period 1 4 Sep 2023 Bachelor European Public Health 27 Oct 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>O. Zvonareva</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, PBL, Training(s) Assessment methods: Computer test, Written exam Fac. Health, Medicine and Life Sciences

Communicable and Non-communicable Diseases in the EU and WHO-Euro

Full course description

The module focusses on health and disease not only within the EU but takes the wider perspective of the WHO European region. In this geographical and geo-political perspective, concrete communicable and non-communicable diseases are the focus of attention. You will learn about common and rare diseases and the policy frames to counter these. The classic perspective of public health is to focus on infectious diseases. Thus, the module will start with the introduction of infectious diseases. You will discuss diseases caused by bacteria, viruses and parasites and their incidence and prevalence. You will learn about policy initiatives to prevent and fight these diseases across the WHO European region. For non-communicable diseases, we cover three broad subcategories: 1) metabolic-toxic diseases like cardiovascular diseases and diabetes, 2) cancer and 3) mental health. In the context of bacterial infectious diseases, the module explores the issue of antimicrobial resistance - in Europe and globally. The structure of the module reflects the idea of "layers of complexity", which means that you will learn about diseases starting from 1) understanding different definitions of diseases and their causality; 2) learning about the complexities of comorbidities; 3) understanding the burden of mental disorders; 4) the role of antimicrobial resistance; 5) the role of broader environment in human health. This module thus approaches diseases through a certain frame, namely through different perspectives and from different angles, among them: aetiology, comorbidity, bio-social determinants, and health equity. Within this module, you will be introduced to the social, biological and epidemiological aspects of diseases. It is not expected that you have prior indepth knowledge in biology. However, for future public health professionals who will work in collaboration with medical doctors and biomedical scientists, it is important to understand some of the concepts and challenges that these professionals meet in their practice.

Course objectives

Expert

By the end of the course, students should be able to:

• Define (European) public health as a domain, identify main public health methods;

- Distinguish between public health and (medical approaches to) health care;
- Recall and name basic public health measures of health status;
- Identify key health indicators and extract such indicators from scientific literature;
- Recall, list and describe (influential models of) factors that determine health status;
- Articulate diverse roles of public policy in health protection & promotion within the EU;
- Outline archetypal structures of public health infrastructure in Europe.

Investigator

By the end of the course, students should be able to:

- Explain basic forms of qualitative and quantitative research methods
- Summarize the empirical cycle, in particular phase 2 "selecting research methods";
- Identify basic components and levels of public health interventions;
- Explain and illustrate problems using academic approaches and critiques;
- Describe the ways in which research forms the basis for public health activity;
- Name sources of quality public health information.

Communicator

By the end of the course, students should be able (on a basic level) to:

- Present on public health topics for peers and teachers;
- Demonstrate understanding of feedback from teachers and peers;
- Produce limited feedback for peers under supervision.

Professional

By the end of the course, students should be able to:

- Accept and reflect on feedback from staff and students passively;
- Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work;
- Contribute actively and positively in tutor groups and training groups;
- Understand, describe and apply the problem-based learning approach;
- Positively engages the challenges and opportunities of intercultural diversity within tutorial groups.

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1022 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>A. Kamenshchikova</u>

Bachelor European Public Health Teaching methods: Lecture(s), PBL Assessment methods: Attendance, Written exam Keywords: Changing disease trends; communicable diseases; non-communicable diseases; policies Fac. Health. Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 2

Full course description

Course EPH1222 includes the Specialized Competency Lines (SCLs) Research Methodology, Statistics, Epidemiology and Policy Advocacy as taught in period 2. This SCLs are interwoven with the main course EPH1022 ''Communicable and non-communicable diseases in the EU and WHO Euro". For a description of this main course we refer to EPH1022.

SCLs are longitudinal, cumulative learning lines, reflecting thematically focused bundles of (portions of) competencies to be achieved. The following five SCLs are interwoven throughout the programme: Research Methodology, Statistics, Epidemiology, Philosophy of Public Health and Policy Advocacy.

Students have been introduced to all SCLs in period 1 and will continue developing them in period 2. For a description of the SCL Philosophy of Public Health in periods 1 and 2, please consult course EPH1241.

Course objectives

Expert

By the end of the course, students should be able to:

- Identify key health indicators and extract such indicators from scientific literature
- Identify key examples of public health policy and programmes in Europe: describe the Treaties of the EU and how public health is addressed in these treaties

Investigator

By the end of the course, students should be able to:

- Summarize the empirical cycle, in particular phase 1 "Formulating a research problem"
- Assess scientific research and publications at a basic level under close supervision
- Describe the ways in which research forms the basis for public health activity
- Explains basic forms of qualitative and quantitative research
- Calculate measures of central tendency and variation
- Make graphical depictions of data and tables summarizing data
- Perform some basic statistical tests

Communicator

By the end of the course, students should be able (on a basic level) to:

- Demonstrate understanding of feedback from teachers and peers
- Produce limited feedback for peers under supervision

Professional

By the end of the course, students should be able to:

• Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work (both on-campus and online), also in a culturally diverse context

EPH1222 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>E. Ambrosino</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, PBL, Presentation(s) Assessment methods: Assignment, Attendance, Oral exam, Participation, Presentation Fac. Health, Medicine and Life Sciences

Qualitative Research Methodology

Full course description

Healthcare and public health environments are facing challenges, including those brought by ageing, technological advances, economic inequalities, and shifting expectations of society. Qualitative research has unique strengths in producing nuanced and people-centered knowledge crucial for understanding impacts of health interventions and complex arrangements of care, among others. During this module students will learn how qualitative research can be used in understanding and addressing contemporary health problems, understand the theoretical foundations of qualitative research; practice qualitative data collection and analysis techniques; and reflect on meaningful ways to combine qualitative and quantitative approaches. Concurrently with delving into qualitative health research, students will work on their year paper with support of trainings in literature search, academic writing, and citation management.

The module is organized around core themes in qualitative research: defining and designing qualitative research project; collecting data; analyzing data and ensuring quality; theory and innovative approaches in qualitative research. The module is practice oriented to allow students master essential techniques sufficient to independently conceive and implement basic qualitative research study.

There are three work formats in this course:

- Lectures, which are planned to be as interactive as possible. Students should be prepared to engage in discussions and participate in short exercises.
- Journal club meetings, where students will be provided with several examples of published qualitative studies to be read before the meeting and guiding questions to direct their reading. During the meetings students together with tutor will analyze the studies and formulate final answers to the questions posed.
- Practicals, during which students will be practicing the elements involved in conducting qualitative research.

Course objectives

Students who successfully finish the module will be able to:

- Define qualitative research, its relationship with quantitative research, and its distinct roles in health research and practice;
- Know the type of research questions that can be answered with specific qualitative methods and know how to formulate qualitative research questions;
- Demonstrate basic knowledge of a range of qualitative data collection methods, their possibilities and limitations;
- Conduct individual semi-structured interviews;
- Conduct qualitative observational research;
- Demonstrate a basic knowledge of a range of qualitative data analysis approaches
- Prepare and perform thematic content analysis using qualitative data analysis software (Atlas.ti);
- Understand the key issues in qualitative research design;
- Be able to appraise the quality of qualitative research;
- Understand and reflect on the theoretical foundations of qualitative research;
- Be aware of the benefits and challenges involved in mixed-methods research;
- Be aware of the issues to consider in planning a qualitative research project;
- Reflect on the meaning of this module's content for their future professional work.

Recommended reading

Green, J. & Thorogood, N. (2018) Qualitative Methods for Health Research, SAGE Olson, Young & Schulz (2016) Handbook of Qualitative Health Research for Evidence-Based Practice, Springer Tolley, Ulin, Mack, Robinson, Succop (2016) Qualitative Methods in Public Health: A Field Guide for Applied Research, 2nd Edition Kvale, S. (2007) Doing Interviews, SAGE Flick, U. (2013) The SAGE Handbook of Qualitative Data Analysis

EPH1023 Period 3 8 Jan 2024 2 Feb 2024 Print course description ECTS credits: 3.0 Instruction language:

English Coordinator:

• <u>O. Zvonareva</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Research, Skills Assessment methods: Assignment, Attendance, Computer test, Written exam Keywords: qualitative research, Methodology, academic writing, Individual Interviews, Thematic content analysis, Qualitative observations Fac. Health, Medicine and Life Sciences

Year 1 Paper

EPH1242 Period 3 8 Jan 2024 2 Feb 2024 <u>Print course description</u> ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>O. Zvonareva</u>

Fac. Health, Medicine and Life Sciences

Healthy Environments and Sustainability in the EU

Full course description

The module Environmental Health and Sustainability in the EU focuses on the environment as a determinant of health, and sustainability, in a European context (ILO: E112, E212, E412). Environment is a broad concept which can comprise (the interaction between) biological, physical, chemical, socio-economic, cultural, institutional and individual factors. This module particularly focuses on the interaction between the social environment (e.g., communities, employment) (ILO: E311, E413, E213) and the (changing) physical environment (e.g., climate change, air and water quality, biodiversity, and ecological issues related to food supply) (ILO: E212, E311). The complexly intertwined social and environmental dynamics of global change increase uncertainties and create specific challenges in the design of health supporting environments and the development of (public health) policy (ILO: I711, I712, E412, E512). Students will study the health impact of environments on various levels and will study how cities, workplaces, and the use of farmland can be managed in the interest of health, well-being and sustainability (ILO: I711, I712, E112, E212, E213, E412). The dynamic intersection of public health with other disciplines is evident in the design process of (built) environments and policy developments, which is why students will be introduced to the pioneering academic fields of One Health and Planetary Health, as well as to inclusive policy approaches, such as the Sustainable Development Goals, WHO Healthy Cities and Health in All Policies (HiAP) (ILO:

E412, I812, C1511). Environmental factors such as climate change, biodiversity loss and land use change can impact the individual citizen level, for example through effects on health and well-being, but at the same time transcend national and European boundaries and governments. By introducing a systems theory approach, the module zooms in and out through various scale levels, but at the same time keeps a specific European focus, analyzing European processes and policies (e.g., Parma Commitment to Act, 20-20-20 targets EU, WHO European Healthy Cities Network, EU Health & Safety at the Workplace). Main principles and themes addressed are: systems thinking, socio-ecological systems, the environmental health and food production chain, sustainable employability, health impact analysis and translation in to policy.

Course objectives

Expert

By the end of the module, students should be able to:

- Define and reflect on (European) public health as a domain, identify main public health methods.
- Recall and name basic public health measures of health status.
- Identify key health indicators and extract such indicators from scientific literature.
- Describes patterns of socioeconomic and other inequalities in health status.
- Recall, list and describe (influential models of) factors that determine health status.
- Distinguishes the concepts of correlation and causality.
- Recognizes scientific evidence establishing correlation and causality of investigated factors with health status.
- Articulates diverse roles of public policy in health protection and promotion within the European Union.
- Describes organizational factors within work environments that impact health status.
- Outlines archetypical structures of public health infrastructure in Europe.

Investigator

By the end of the module, students should be able to:

- Writes a basic narrative literature review paper under close supervision
- Explains basic forms of qualitative and quantitative research methods and data collection.
- Matches and applies basic statistical analyses to research data.
- Describes examples of interventions used in public health practice and policy.
- Identifies basic components and levels of interventions.
- Explain and illustrate problems using academic approaches and critiques.
- Assess scientific research and publications at a basic level under close supervision.
- Recall fundamental principles of research ethics and integrity.
- Describe the ways in which research forms the basis for public health activity.
- Name sources of quality public health information.
- Read selectively in terms of both quantity and quality of reading materials.
- Relate problem-based learning techniques to personal learning goals and process.

Communicator

By the end of the module, students should be able (on a basic level) to:

• Presents on public health topics for peers and teachers.

- Discuss topics and findings in English (aiming for level B2).
- Identifies target audience, aim, and channels of a program of public health communication.
- Demonstrates understanding of feedback from teachers and peers.
- Produces limited feedback for peers under supervision.
- Defines diversity in its numerous forms.
- Describes key dimensions of diversity in Europe.
- Recalls and summarizes the Health-In-All-Policies (HIAP) tradition in New Public Health.
- Describes the health promotion idea (e.g. Ottawa charter) of mediating and advocating for health.

Professional

By the end of the module, students should be able to:

- Participates in structured thesis group meetings.
- Accepts feedback from staff and students.
- Summarizes what has been learned.
- Describes strategies to promote personal growth.
- Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work, also in a culturally diverse context (P1813).
- Identifies personal bias and prejudices related to professional responsibilities.
- Contribute actively and positively in tutor groups and training groups.
- Understand and describe the problem-based learning approach.
- Positively engages the challenges and opportunities of intercultural diversity within tutorial groups.

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1024 Period 4 5 Feb 2024 5 Apr 2024 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>C. Beumer</u>

Teaching methods:

Assignment(s), Lecture(s), Work in subgroups, Presentations, Research, Paper(s), PBL, Skills Assessment methods: Assignment, Attendance, Computer test, Portfolio, Presentation, Written exam Keywords: Environmental Health, Sustainability, Complex Adaptive Systems, Anthropocene, climate change, Urbanization, Occupation, agriculture, Planetary Health, Environmental Health Policies

Epidemiology/Methodology/Policy Advocacy/Statistics 3

Full course description

Course EPH1224 includes the Specialized Competency Lines (SCLs) Research Methodology, Statistics, Epidemiology and Policy Advocacy as taught in period 4. This SCLs are interwoven with the main course EPH1024 ''Sustainable Environments in the EU". For a description of this main course we refer to EPH1024.

SCLs are longitudinal, cumulative learning lines, reflecting thematically focused bundles of (portions of) competencies to be achieved. The following five SCLs are interwoven throughout the programme: Research Methodology, Statistics, Epidemiology, Philosophy of Public Health and Policy Advocacy.

Students have been introduced to all SCLs in periods 1 and 2 and will continue developing them in period 4. For a description of the SCL Philosophy of Public Health in periods 4 and 5, please consult course EPH1243.

Course objectives

Please see the intended learning outcomes associated with EPH1024.

EPH1224 Period 4 5 Feb 2024 5 Apr 2024 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>C. Beumer</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, PBL, Research, Skills Assessment methods: Assignment, Attendance, Participation, Presentation Fac. Health, Medicine and Life Sciences

Philosophy of Public Health part 2

Full course description

Please see modules EPH1024 and EPH1025.

Course objectives

Please see modules EPH1024 and EPH1025.

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1243 Period 4 5 Feb 2024 5 Apr 2024 <u>Print course description</u> ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>O. Zvonareva</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, PBL, Skills, Training(s) Assessment methods: Assignment, Attendance, Computer test, Written exam Fac. Health, Medicine and Life Sciences

Health-Technological Innovation and EU Competencies

Full course description

The module starts with an introduction focused on the challenges of sustainable innovation in the complex world of healthcare. This interdisciplinary module introduces students to the concept and process of health technological innovation and the role that EU institutions play in this process.

In the subsequent two weeks, the topics of safety, privacy, assessment and implementation related to health technological innovation are introduced.

The following three weeks cover specific innovations, namely innovations related to, for example: (1) pharmaceuticals, (2) medical devices, (3) big data. The EU legal competencies and EU policy initiatives related to each of these domains, are also incorporated in the module, as well as the key public and private sector players, and their roles and partnerships per domain.

The module also touches upon possible involvement of health consumers in the innovation process to co-create new health products, process and policy initiatives that cater to consumer preferences, and improve their experience and quality of life.

Parallel to this, students work on a project assignment focused on di/e-/m-health technology. Students learn how to pick up a new idea that responds to specific health needs, investigate it through theoretical public health and health care models, and apply it to a real-world setting taking into account legal, financial and social constraints.

Example topics include: ethical and societal challenges of health technological innovation, unintended consequences of health technological innovation, questionnaire design and data coding, sample vs sampling variability, case studies.Students explore additional topics as part of the Specialized Competency Lines (SCL).

The module ends with a refection week, which brings together various topics discussed throughout the module, followed by an exam week.

Course objectives

Expert

By the end of the module, students should be able to:

- Define and reflect on health technological innovation as a domain, identify main health technological innovation methods
- istinguish between public health and medical approaches to technological innovation in health care
- dentify the organs and major political, administrative, and legal structures and processes of the European Union (related to health technological innovation)
- Articulates diverse roles of public policy in health protection and promotion within the European Union (related to health technological innovation)
- Identifies key examples of public health policy and programs in Europe (related to health technological innovation)
- Defines roles of insurer, provider and patient (related to health technological innovation)

Investigator

By the end of the module, students should be able to:

- Explains basic forms of qualitative and quantitative research methods and data collection
- Summarize the empirical cycle
- Describe examples of interventions used in public health practice and policy
- dentify basic components and levels of interventions
- Define science, scientific thinking and scientific knowledge
- Explain and illustrate problems using academic approaches and critiques
- Assess scientific research and publications at a basic level under close supervision
- Recall fundamental principles of research ethics and integrity
- Describe the ways in which research forms the basis for public health activity
- Name sources of quality public health information
- Read selectively in terms of both quantity and quality of reading materials
- Relate problem-based learning techniques to personal learning goals and process

Communicator

By the end of the module, students should be able (on a basic level) to:

- Present on public health topics for peers and teachers
- Discuss topics and findings in English (aiming for level B2)
- Identify target audience, aim, and channels of a program of public health communication
- Demonstrate understanding of feedback from teachers and peers
- Produce limited feedback for peers under supervision

Professional

By the end of the module, students should be able to:

- P1611. Accept feedback from staff and students passively
- P1613. Summarize what has been learned
- P1615. Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work
- P1711. Contribute actively and positively within tutor groups and training groups
- P1811. Understand and describe the problem-based learning approach
- P1813. Positively engage the challenges and opportunities of intercultural diversity within tutorial groups

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1025 Period 5 8 Apr 2024 7 Jun 2024 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>M.I. Pavlova</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Presentations, Training(s) Assessment methods: Assignment, Attendance, Computertest, Final paper, Participation, Presentation, Written exam Keywords: health technological innovation, EU legal competencies, safety, privacy, Public Health, pharmaceuticals, medical devices, big data, d/e/m-health technology, diffusion of innovation, implementation of innovation Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 4

Full course description

Course EPH1225 includes the Specialized Competency Lines (SCLs) Research Methodology, Statistics, Epidemiology and Policy Advocacy as taught in period 5. This SCLs are interwoven with the main course EPH1025 ''Health Technological Innovation and the European Union''. For a description of this main course we refer to EPH1025.

SCLs are longitudinal, cumulative learning lines, reflecting thematically focused bundles of (portions of) competencies to be achieved. The following five SCLs are interwoven throughout the programme:

Research Methodology, Statistics, Epidemiology, Philosophy of Public Health and Policy Advocacy.

Students have been introduced to all SCLs in periods 1, 2 and 4 and will continue developing them in period 5. For a description of the SCL Philosophy of Public Health in periods 4 and 5, please consult course EPH1243.

Course objectives

Please see the learning goals within the description of EPH1025.

EPH1225 Period 5 8 Apr 2024 7 Jun 2024 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>M.I. Pavlova</u>

Teaching methods: Assignment(s), Work in subgroups, PBL, Presentations Assessment methods: Assignment, Attendance, Computer test, Participation, Presentation Fac. Health, Medicine and Life Sciences

Introduction to Statistical Methods for Data Analysis

Full course description

Year one of the new BEPH curriculum concludes with the statistics module, which builds the foundation of statistical methodology and hypothesis testing. The module consists of three themes: (1) Summarizing and describing research data; (2) Testing concept, generalization of results obtained from sample; (3) Introduction to basic statistical techniques. The first theme explores various methods for summarizing and visualizing data collected within a specific research context. Students learn about typology of variables (quantitative vs qualitative), central tendencies and dispersion, and graphical tools like histogram and boxplot. In addition, they study measures of association between two variables such as Pearson correlation, relative risk and odds ratio. An important focal point is the difference between correlation and causation. Theme two of the module is devoted to inferential statistics implying the degree to which conclusions obtained from a sample (of persons) can be generalized to a much larger group (i.e., population). A distinction is made between population, sample and sampling distribution. The latter eventually leads to the concept of confidence intervals for testing. Statements about the population are translated statistically as a null hypothesis and alternative hypothesis and concepts like significant level, p-value, type I and type II errors, and power are discussed in detail. In theme 3, students are introduced to basic statistical techniques for testing a hypothesis, such as the t-test for one sample, two (paired and unpaired) samples, and post-hoc comparisons for more than two samples. Finally, the module ends with simple

statistical methods for studying relationships between two variables like the chi-square or linear regression analysis.

Course objectives

Expert

By the end of the module, students should be able to:

- Recall and name basic public health measures of health status
- Distinguishes the concepts of correlation and causality
- Recognizes scientific evidence establishing correlation and causality of investigated factors with health status

Investigator

By the end of the module, students should be able to:

- Explains basic forms of (qualitative and) quantitative research methods and data collection
- Matches and applies basic statistical analyses to research data
- Define science, scientific thinking and scientific knowledge
- Assess scientific research and publications at a basic level under close supervision
- Recall fundamental principles of research ethics and integrity
- Reads selectively in terms of both quantity and quality of reading material

Communicator

By the end of the module, students should be able (on a basic level) to:

- Presents on public health topics for peers and teachers
- Discuss topics and findings in English (aiming for level B2)
- Demonstrate understanding of feedback from teachers and peers
- Produce limited feedback for peers under supervision

Professional

By the end of the module, students should be able to:

- Accept and reflect on feedback from staff and students passively
- Behave in a respectful, professional and reliable manner in tutor groups, practicals and group work.
- Contribute actively and positively in tutor groups and training groups
- Understand, describe and apply the problem-based learning approach
- Positively engages the challenges and opportunities of intercultural diversity within tutorial groups

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1026 Period 6

Bachelor European Public Health 10 Jun 2024 5 Jul 2024 Print course description ECTS credits: 6.0 Instruction language: English Coordinator:

• <u>S. Jolani</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, PBL, Skills, Training(s) Assessment methods: Assignment, Attendance, Written exam Keywords: health, (European) public health, problem based learning, methodology, epidemiology, descriptive statistics, Inferential statistics, data analysis Fac. Health, Medicine and Life Sciences

Introduction to Academic Writing and Year 1 Paper

Recommended reading

This is the link to Keylinks, our online reference list.

EPH1027 Period 3 8 Jan 2024 2 Feb 2024 Print course description ECTS credits: 6.0 Instruction language: English Coordinator:

• <u>O. Zvonareva</u>

Second year courses

Bachelor EPH Year 2

Fac. Health, Medicine and Life Sciences

Demography and Epidemiology of Ageing, and Migration in the EU

Full course description

The 8-week course 'Demography and Epidemiology of Ageing and Migration in the EU' (EPH2021) runs during the first period in year 2 of the Bachelor European Public Health (EPH). The course's main topics are demography and epidemiology, with a special focus on population ageing and migration as important demographical developments in the European Union (EU). As part of course EPH2021, students will learn to apply epidemiological methods to examine the impact of important demographical developments on public health in the EU.

EPH2021 consists of three parts. In Part I (wk 1), demography will be introduced and students will learn to describe and analyze the extent and causes of population ageing and migration in the EU. In Part II (wks 2-5), several core epidemiological concepts and methods will be dealt with, including research designs, association measures, bias, effect-modification, validity & reliability, and causal interpretation of research findings. Students will familiarize themselves with these concepts by applying them to examine how population ageing and migration impact health in the EU. The role of socio-economic differences will also be considered. Next to the exploration of ageing-related diseases (e.g. dementia), the course also introduces reproductive/child health. Finally, students will learn in Part III (wks 6-8) to apply the knowledge from the first two parts to compare and critically appraise preventive measures (e.g. population screening) and public health policies for controlling negative health consequences of population ageing and migration in the EU.

EPH2021 consists of a variety of teaching activities. Weekly tutorial group meetings are the mainstay of the course, which are supported by various lectures providing theoretical background and several working lectures and a journal club for practicing with important concepts. Next to the course's main teaching activities, several activities of Specialized Competency Lines (SCLs) Philosophy of Public Health, Policy Advocacy and Statistics are scheduled throughout EPH2021.

Course objectives

Expert

- organize and apply health definitions within the context of health interventions, policies, and research;
- produce comparative analyses of health status and inequalities using a basic public health toolkit;
- analyse real-world data on health status and inequalities;
- apply techniques to analyse and interpret correlation and causation between variables;
- examine and analyse the effects of confounding and effect modification / interaction;
- describe and compare health-relevant public policies at Member State and EU levels;
- \bullet inventory and describe specific examples of public health and health care systems.

Investigator

- describe advantages and disadvantages of standard epidemiological research designs and data collection;
- match and apply intermediate-level statistical analyses to research data;
- distinguish among various categories (i.e. types) of public health interventions at community, organization and policy levels;
- match research methods and data analysis to specific intervention types;
- apply critical academic thinking tools to dilemmas in public health policy, practice, and scientific research;

- test principles of research ethics and integrity against case studies from practice;
- identify and contrast differing targets (aims) and methods of implementing, financing and applying public health research projects;
- apply a life-long learning concept to one's own professional planning.

Communicator

- write academic material at English Level C1;
- present on public health topics for a lay audience;
- defend findings and academic reflections upon findings with academic staff;
- discuss topics and findings at English Level C1;
- provide constructive and insightful feedback to peers on selected assignments and group processes;
- summarize health impacts of diversity in Europe, including socio-economic health inequities.

Professional

- co-lead structured project groups;
- engage feedback from staff and students actively;
- behave in a respectful, professional and reliable manner in tutor groups, practicals, and group work;
- identify personal bias and prejudices related to professional responsibilities and act responsibly to address them;
- ask critical questions and test commonly-held assumptions in forming views on health issues;
- contribute actively and positively within tutor groups and training groups;
- contribute actively and positively within autonomous project teams and 'new' teams in the minor;
- explore alternative forms of problem-based learning (e.g. digital learning platforms, flipped classroom)

Recommended reading

This is the link to Keylinks, our online reference list.

EPH2021 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>E.H. van Roekel</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Presentations, Research, Skills, Training(s)

Assessment methods: Assignment, Attendance, Presentation, Written exam Keywords: Demography; epidemiology; research methods; public health; migration; population ageing; socioeconomic inequalities; population screening; public health policy Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 5

Full course description

During the course EPH2021, several activities are planned that are part of the SCLs Policy Advocacy and Statistics (the activities of the SCL Philosophy of Public Health are part of a separate code, i.e. EPH2241).

SCL Statistics

The main topic of the SCL Statistics is 'Questionnaire Analysis'. Students will learn how to assess and interpret psychometric properties of a measurement tool, i.e., the reliability and validity of a questionnaire. Several activities for the SCL statistics are scheduled. These include two 2-part lectures (four lectures of 1 hour), two SPSS practical sessions (2 hours each), and two feedback lectures (1.5 hours each). In addition, students need to work in small groups of 3-4 students on a take-home assignment that will be graded on a scale between 1 and 10.

SCL Policy Advocacy

The SCL Policy Advocacy in this course will focus on policy advocacy as a tool for agenda setting. How can you help set the agenda for policy innovation and development as a health professional? Also, we will examine a case study on policy advocacy from the United States using the work of Dean Ornish which led to funding for lifestyle change interventions within the national medical insurance program Medicare.

Course objectives

Expert

- organize and apply health definitions within the context of health interventions, policies, and research;
- produce comparative analyses of health status and inequalities using a basic public health toolkit;
- analyse real-world data on health status and inequalities;
- describe and compare health-relevant public policies at Member State and EU levels;
- inventory and describe specific examples of public health and health care systems.

Investigator

- match and apply intermediate-level statistical analyses to research data;
- distinguish among various categories (i.e. types) of public health interventions at community, organization and policy levels;
- apply critical academic thinking tools to dilemmas in public health policy, practice, and

scientific research;

- test principles of research ethics and integrity against case studies from practice;
- identify and contrast differing targets (aims) and methods of implementing, financing and applying public health research projects;
- apply a life-long learning concept to one's own professional planning.

Communicator

- write academic material at English Level C1;
- defend findings and academic reflections upon findings with academic staff;
- discuss topics and findings at English Level C1;
- provide constructive and insightful feedback to peers on selected assignments and group processes;
- summarize health impacts of diversity in Europe, including socio-economic health inequities.

Professional

- co-lead structured project groups;
- engage feedback from staff and students actively;
- behave in a respectful, professional and reliable manner in tutor groups, practicals, and group work;
- identify personal bias and prejudices related to professional responsibilities and act responsibly to address them;
- ask critical questions and test commonly-held assumptions in forming views on health issues;
- contribute actively and positively within tutor groups and training groups;
- contribute actively and positively within autonomous project teams and 'new' teams in the minor.

Recommended reading

Explained during the learning activities and/or on the CANVAS pages of the SCLs.

EPH2221 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 2.0 Coordinator:

• <u>E.H. van Roekel</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), Research, Skills Assessment methods: Assignment, Attendance Keywords: Policy Advocacy, Agenda Setting, policy innovation, statistics, questionnaire analysis, psychometric properties, validity, reliability and validity Fac. Health, Medicine and Life Sciences

Philosophy of Public Health SCL

EPH2241 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>O. Zvonareva</u>

Fac. Health, Medicine and Life Sciences

Lifestyle, Work and Health in the EU

Full course description

After students have gained insight in the determinants of health and public health methods in general (courses EPH1021 and EPH1022), and in the influence of the (macro) social and physical environment on health (course EPH1024), this course specifically focuses on lifestyle and work characteristics as determinants of health. Students will also be introduced to methods to improve health and quality of life by intervening in these determinants, i.e. by health promotion, work-related interventions, and (EU) policies and regulations regarding lifestyle and work.

The course is structured according to a socio-ecological model, in which individual health is seen as a result of micro, meso and macro level influences and their interactions. On the micro level, the course focusses on the individual's lifestyle, i.e. the individual's health-related behaviour. On the meso level the focus of attention is on the work characteristics and how these influence employee health, and on the macro level the focus is on EU policies and regulations with regard to lifestyle and occupational health.

Work characteristics can affect individual health directly (e.g. dangerous or stressful working situations), and indirectly through lifestyle (e.g. shift work leading to an unhealthy lifestyle). Students will also be introduced in how socio-economic status, work characteristics and lifestyle interact, and how this contributes to socio-economic inequalities in health.

The socio-ecological model is also used to describe how interventions or (EU) policies and regulations can lead to improved health and quality of life. On a micro level, it is addressed how the individual's behaviour can be changed to a healthier lifestyle. On a meso level, it is addressed how work characteristics can be improved and how the work site setting can be used for promoting a healthy lifestyle. And on a macro level, it is discussed how (EU) policies and regulations can lead to more health and well-being.

Course objectives

By the end of the course, the student:

• Organizes and applies lifestyle and work related determinants of health on a micro, meso and macro level, and analyses what this means for interventions and policies.

- Analyses lifestyle and work influences on health and inequalities in health, and analyses what this means for interventions and policies.
- Analyses real-world data on health status and inequalities in relation to life style, work and work settings.
- Describes and compares health-relevant public policies with respect to lifestyle and occupational health at Member State and EU levels.
- Describes taxonomies of organizational factors and policies within work environments that impact health status
- Inventories and describes specific examples of public health with respect to lifestyle and the work context.
- Distinguishes among various categories (i.e. types) of work related and health promotion interventions at community, organization and policy levels.
- Matches research methods and data analysis to work-related and health promotion interventions.
- Applies critical academic thinking tools to dilemmas in work-related and health promotion policy, practice, and scientific research.
- Presents on public health topics for a lay audience.
- Identifies personal bias and prejudices related to distribution of responsibility and blame for (poor) health and acts responsibly to address them.
- Has experience with alternative forms of problem-based learning (i.e. flipped classroom).

Recommended reading

This is the link to Keylinks, our online reference list.

EPH2022 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 8.0 Instruction language: English Coordinator:

• <u>R.M. Meertens</u>

Teaching methods:

Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Presentations, Training(s) Assessment methods:

Assignment, Attendance, Final paper, Presentation, Written exam, Computertest, Participation Keywords:

lifestyle, Work characteristics & conditions, Lifestyle interventions, Socio-economic health differences, health promotion, occupational health, Work place, Socio-ecological model. Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 6

Full course description

Course EPH2222 includes the Specialized Competency Lines (SCLs) Statistics, Epidemiology and Policy Advocacy as taught in period 2 of year 2. This SCLs are interwoven with the main course EPH2022 'Lifestyle, Work and Health in the EU'. For a description of this main course we refer to EPH2022. SCLs are longitudinal, cumulative learning lines, reflecting thematically focused bundles of (portions of) competencies to be achieved.

For a description of the SCL Philosophy of Public Health, please consult course EPH2241. In the SCL Statistics in this second period, students will be introduced to simple and multiple linear regression. In the SCL Epidemiology, students will be introduced to the concept of 'population attributable risks', and the importance for disease prevention. In the SCL Policy Advocacy, students will be introduced into policy advocacy for healthy work environments.

Course objectives

By the end of the course the student:

- Verbally debates case studies of policy change and advocacy for health in the field of health promotion and occupational health.
- Matches and applies simple and multiple linear regressions to research data.
- Applies techniques to analyze and interpret population attributable risk, and understands the importance of this concept for disease prevention.

Recommended reading

Rockhill B et al. "Use and misuse of population attributable fractions". Am J Public Health 1998;38:15-19.

EPH2222 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>R.M. Meertens</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), Skills, Training(s) Assessment methods: Assignment, Attendance, Participation, Written exam, Final paper Keywords: epidemiology, statistics, Policy Advocacy, Population attributable risk, Simple and multiple regression analysis. Fac. Health, Medicine and Life Sciences

Excursion to Central and Eastern Europe

Full course description

The excursion to Kraków, Poland takes place in November, with activities taking place Monday-Friday in Kraków.

The purpose of the excursion is for Bachelor EPH students, to have an in-depth field experience of various dimensions of the Polish (public) health care system. We enjoy lectures from our Polish colleagues at Jagiellonian University, one of Europe's oldest universities. We also make site visits and excursions to health-care facilities and take tours of cultural destinations. Along the way, students will learn a great deal about the history of Poland, its healthcare system, and how that history has been influenced by Poland's membership in the European Union. Students will also enjoy evenings together and can socialize with fellow students in Year 2.

Course objectives

Professional

- Contributes actively and positively within autonomous project teams and 'new' teams in the minor
- Asks critical questions and tests commonly-held assumptions in forming views on health issues
- Identifies personal bias and prejudices related to professional responsibilities and acts responsibly to address them
- Behaves in a respectful, professional and reliable manner during the excursion
- Engages feedback from staff and students actively

Communicator

- Provides constructive and insightful feedback to peers
- Summarizes health impacts of diversity in Europe, including socio-economic health inequities
- Appraises meaning of cultural diversity during possible minor period abroad and thereby shows cultural curiosity and openness, self-reflection and adaptability
- Defends findings and academic reflections upon findings with academic staff and thereby demonstrates intellectual adaptability and nimbleness

Investigator

- Tests principles of research ethics and integrity against case studies from practice
- Applies critical academic thinking tools to dilemmas in public health policy, practice, and scientific research
- Distinguishes among various categories (i.e. types) of public health interventions at community, organization and policy levels

Expert

- Describes and compares health-relevant public policies at Member State and EU levels
- Surveys and contrasts environmental and life-style factors that impact health status
- Analyses real-world data on health status and inequalities
- Contrasts conceptualizations of public health and medicine and associated institutions and

infrastructure EPH2322 Period 2 30 Oct 2023 22 Dec 2023

Print course description ECTS credits: 1.0 Instruction language: English Coordinator:

• <u>A. Wind</u>

Teaching methods: Lecture(s), Working visit(s) Assessment methods: Attendance, Participation Fac. Health, Medicine and Life Sciences

Introduction to Quantitative Research Methods

Full course description

The core topic is program evaluation. Health professionals implement Public health programs at different levels (for example, at individual, community, and national levels), and this often occurs simultaneously. Therefore, the evaluation of such programs is complicated. Ideally, such programs embed evaluation from the start. Outcome evaluation investigates if program goals are met for example increase of knowledge or decrease in health complaints. Process evaluation investigates how the program is implemented by professionals and participants Process data can help explain the outcomes for example certain goals may not be met because corresponding activities were not implemented at all or did not fulfill participants' needs. In this module, students work with real-world data and apply statistical analyses they are familiar with (Chi-square tests, t-tests and regression analyses).

Experimental designs (RCTs) are the gold standard for outcome evaluation. However, randomization at individual level is not always feasible or appropriate in public health programs.

In week 1, quasi-experimental designs are introduced as good alternatives for programs at individual level. In addition, students learn how to compensate for design weaknesses within statistical analyses for example combining process data and outcome data or controlling for baseline differences between groups caused by non-randomization.

In week 2, cluster randomized trials are introduced as good alternatives for multilevel programs that not only promote individual behavior change but also environmental change. The implications for sample size calculation are explained.

In week 3, participatory action research is introduced as good example of mixed-methods approaches. The term "mixed-methods" refers to the combination of qualitative and quantitative methods. The term "participatory" refers to giving voice to participants throughout all phases of the program that is development, implementation and evaluation.

Course objectives

The main goal of EPH2023 is to enable students to select good alternative research methods for program evaluation when the gold standard (RCT) is not feasible or not appropriate.

Expert:

- Organizes and applies health definitions within the context of health interventions, policies, and research
- Analyses real-world data on health status and inequalities
- Applies techniques to analyse and interpret correlation and causation between variables
- Examines and analyses the effects of confounding and interaction

Investigator:

- Describes advantages and disadvantages of standard research designs and data collection
- Matches and applies intermediate-level statistical analyses to research data
- Distinguishes among various categories (i.e. types) of public health interventions at community, organization and policy levels
- Matches research methods and data analysis to specific intervention types
- Applies critical academic thinking tools to dilemmas in public health policy, practice, and scientific research
- Tests principles of research ethics and integrity against case studies from practice
- Identifies and contrasts differing targets (aims), & methods of implementing, financing and applying public health research projects

Professional:

- Engages feedback from staff and students actively
- Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- Contributes actively and positively within tutor groups and training tutorial groups

Recommended reading

This is the link to Keylinks, our online reference list.

EPH2023 Period 3 8 Jan 2024 2 Feb 2024 Print course description ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>R.M. Vasse</u>

Teaching methods: Assignment(s), Lecture(s), PBL, Skills

Assessment methods: Written exam, Assignment Keywords: Quantitative research, Mixed-methods, Program evaluation, Quasi-experimental designs Fac. Health, Medicine and Life Sciences

Year 2 Paper

Full course description

The Year 2 Paper (EPH2242) is an individual assignment related to issues discussed in one of the four main content modules (EPH1024, EPH1025, EPH2021 or EPH2022) given since the Year 1 Paper. Compared to the Year 1 Paper, the Year 2 paper is more substantial and written without direct supervision. More substantial implies a more systematic approach and reviewing more studies. Furthermore, the Year 2 Paper should contain a critical appraisal of the methods employed by the studies reviewed in the paper. Without direct supervision implies peer group meetings instead of tutorial group meetings. Although there are no contact hours with teachers, students do receive teacher feedback on the research plan (content). In addition, students give and receive peer feedback.

Course objectives

Investigator:

- Writes a substantial narrative literature review paper without supervision and thereby demonstrates personal initiative in study planning
- Describes advantages and disadvantages of standard research designs and data collection
- Matches and applies intermediate-level statistical analyses to research data
- Distinguishes among various categories (i.e. types) of public health interventions at community, organization and policy levels
- Matches research methods and data analysis to specific intervention types
- Applies critical academic thinking tools to dilemmas in public health policy, practice, and scientific research
- Tests principles of research ethics and integrity against case studies from practice
- Identifies and contrasts differing targets (aims), & methods of implementing, financing and applying public health research projects

Communicator:

- Writes a substantial narrative literature review paper without supervision and thereby demonstrates personal initiative in study planning
- Writes academic material at English Level C1
- Provides constructive and insightful feedback to peers on selected assignments and group processes

Professional:

- Engages feedback from staff and students actively
- Develops strategies to promote personal growth
- Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group

work

• Contributes actively and positively within tutor groups and training tutorial groups

Recommended reading

This is the link to Keylinks, our online reference list.

EPH2242 Period 3 8 Jan 2024 2 Feb 2024 <u>Print course description</u> ECTS credits: 3.0 Instruction language: English Coordinator:

• <u>R.M. Vasse</u>

Teaching methods: Lecture(s), Work in subgroups, Paper(s) Assessment methods: Final paper Keywords: literature review Third year courses

Bachelor EPH Year 3

Fac. Health, Medicine and Life Sciences

(Public) Health Care Systems in the EU

Full course description

This module aims at analysing and comparing the organization of health systems and health care reforms in the EU through the lens of health systems frameworks.

The module starts with health system theory in week 1, with special attention to the WHO building blocks. In monitoring the WHO building blocks of health systems, health system financing, alongside accompanying indicators and measurement strategies will be the focus of weeks 2 - 4. Developments in insurance schemes, health care markets, and access to health care, will be discussed through the lens of comparisons and classifications of health system structures in the EU.

- Weeks 5 8 will focus on fundamental concepts of health systems within the key reform trends of health systems that are integrated within the WHO building blocks listed below:
- Week 5:Value-based health systems. From a focus on the volume and profitability of services provided physician visits, hospitalizations, procedures, and tests to a system based on patient outcomes achieved (value-based payment models).
- Week 6: Integrated health systems: From fragmented health systems, in which every local

provider offers a full range of services (silos) to systems organized, in which services for particular medical conditions are concentrated in health delivery organizations and in the right locations to deliver high-value care (integrated care networks).

- Weeks 7 8: Health information systems: the role of artificial intelligence in health care, leveraging health data and analytics, precision and personalized medicine, to name a few. In summary, how to build an enabling information technology platform in European health systems based on a value agenda? From knowledge-driven towards data-driven health systems.
- Weeks 7 8: Health system resilience. Building a health system involves ensuring that strategic health system frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to system design and accountability. Health system resilience is also related to health shocks, such as the current pandemic.

Course objectives

Expert Compentency ILOs

- E132. Evaluates health as a social, economic and political value, historically and in contemporary European settings
- E133. Appraises and debates the value to society of various ways of defining health and health professional infrastructure
- E531. Compares and classifies public health and health system structures in Europe
- E532. Investigates, analyses and compares policies that give structure to public health and health systems in Europe

Investigator Compentency ILOs

- I731. Evaluates the quality of interventions based on scientific criteria and historical bestpractices
- I732. Estimates the impact of interventions based on insights from scientific literature

Communicator Compentency ILOs

• C1431. Adapts models of public health causality and promotion to specific needs of diverse populations

Professional Compentency ILOs

- P1633. Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- P1635. Acts according to ethical standards and norms

Recommended reading

This is the link to Keylinks, our online reference list.

EPH3021 Period 1 4 Sep 2023 27 Oct 2023 Print course description Bachelor European Public Health ECTS credits:

9.0 Instruction language: English Coordinator:

• <u>M.M. Bakker</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Paper(s), PBL, Presentations, Training(s) Assessment methods: Assignment, Attendance, Final paper, Presentation, Written exam Keywords: Health systems, Health economics, Health System Reforms, Comparing European health systems, European Health Union. Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 7

Full course description

Throughout the module, students explore additional topics as part of the Specialized Competency Lines (SCL), such as SCL Methodology (health economics research), SCL Epidemiology (systematic review and meta-analysis), SCL Policy Advocacy (advocacy for equitable access to health care), and in journal club meetings related to SCL Philosophy of Public Health (patient and public participation).

The overall topic of the SCL Methodology will be focused on health technological innovations. This includes a lecture on health technological innovations and an assignment attached to it. Also, it will include one workshop (8 small groups).

The overall topic of the SCL Epidemiology will be focused on systematic review methodology and meta-analysis. This includes a lecture on meta-analysis and a lecture on power calculations and an assignment attached to it. Also, it will include one workshop (8 small groups) on methods.

The overall topic of the SCL Philosophy of Public Health (PPH) will be focused on patient and public involvement/PPI in healthcare. This includes a lecture on logic of care vs logic of choice, and an assignment attached. Also, it will include a journal club (8 small groups) on methods and implications of PPH in healthcare. SCL philosophy has 2 ECTS per semester and its own dedicated exam at the end of period 2.

Course objectives

Expert Compentency ILOs

- E132. Evaluates health as a social, economic and political value, historically and in contemporary European settings
- E133. Appraises and debates the value to society of various ways of defining health and health professional infrastructure
- E531. Compares and classifies public health and health system structures in Europe
- E532. Investigates, analyses and compares policies that give structure to public health and

health systems in Europe

Investigator Compentency ILOs

- I731. Evaluates the quality of interventions based on scientific criteria and historical bestpractices
- I732. Estimates the impact of interventions based on insights from scientific literature

Communicator Compentency ILOs

• C1431. Adapts models of public health causality and promotion to specific needs of diverse populations

Professional Compentency ILOs

- P1633. Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- P1635. Acts according to ethical standards and norms

EPH3221 Period 1 4 Sep 2023 27 Oct 2023 Print course description ECTS credits: 2.0 Instruction language: English Coordinator:

• <u>M.M. Bakker</u>

Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Presentations, Training(s) Assessment methods: Assignment, Attendance, Final paper Keywords: Health Economics Research, epidemiology, systematic review, meta-analysis, Philosophy of Public Health, Patient and Public Participation, Health Technological Innovations. Fac. Health, Medicine and Life Sciences

Health Policies at EU Level and Global Health Europe

Full course description

Policies – defining aims, objectives and means to reach them – significantly impact the health of populations. This course will focus on EU and international health policy making, priority setting, and the role of partnerships and networks in a multilevel decision-making process. The perspectives of evidence-informed policymaking and Health in All Policies will be followed in this module. The students will learn to assess public policies relevant to health using qualitative and quantitative methods in policy analysis.

The policy cycle and the policy triangle frameworks inspire the course structure. Each week of the course will focus on a different facet of health policy:

- 1. the concept of policy and the context of policymaking;
- 2. policy problems;
- 3. actors and stakeholders;
- 4. agenda setting and advocacy;
- 5. the content of policies;
- 6. policy implementation;
- 7. policy evaluation.

We will learn that policy problems must be carefully defined and that problem perceptions and problem framing influence decision-making. We will closely examine the role of scientific evidence in policymaking. Finally, we will reflect on the fact that policy analysis is always normative and that the interests and power of actors, institutions, and developments in the broader environment frame policymaking.

Supported by sessions from the four specialised competency lines, the course will develop your ability to work with policy documents, analyse existing policies, and draft policy recommendations. We expect that many of you will go on to work in policy-intensive environments, guiding policy development in or outside government. Beyond providing a primer in policy analysis, the course will also develop your ability to investigate and solve complex problems and write persuasively.

Course objectives

Expert

By the end of the module, the student:

- Tests and defends the use of health status measures in policies and written scientific output
- Evaluates and advances proposals to reduce inequalities in health status
- Evaluates and critiques health-related public policies at Member State and EU levels
- Compares and selects methods and theories for the evaluation of public and organizational policy processes and outcomes
- Recommends changes to public and organizational policies based on scientific, grey, and other relevant literature
- Investigates, analyses and compares policies that give structure to public health and health care systems in Europe

Investigator

By the end of the module, the student:

- Synthesizes the implications of findings from secondary research for practice and policy contexts
- Estimates the impact of interventions based on insights from scientific literature
- Evaluates the quality and relevance of scientific evidence for public health policies and practice
- Argues coherently using a range of academic thinking skills and philosophical and ethical concepts
- Critiques EU research priorities in light of theoretical perspectives on public health policy processes and practices

• Synthesizes very new (i.e. just-in-time) information into work process

Communicator

By the end of the module, the student:

- Writes a policy brief on an issue of relevance for EU policy and health
- Extrapolates research findings to an applied setting
- Adapts models of public health causality and promotion to specific needs of diverse populations
- Analyses policy advocacy case studies based on major theories of policy change and social entrepreneurship

Professional

By the end of the module, the student:

- Reflects critically on strengths and weaknesses in his/her personal learning process and study performance
- Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- Recognizes and interrogates ethical dilemmas that are relevant to European Public Health
- Acts according to ethical standards and norms
- Contributes actively and positively within tutor groups and training tutorial groups
- Contributes actively and positively within autonomous project teams
- Synthesizes learning in the Bachelor programme with vision

Recommended reading

This is the link to Keylinks, our online reference list.

EPH3022 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 9.0 Instruction language: English Coordinator:

• <u>R. Hrzic</u>

Teaching methods: Lecture(s), PBL, Training(s) Assessment methods: Attendance, Written exam Keywords: Public Policy Analysis, European Union health policy, global health governance Fac. Health, Medicine and Life Sciences

Epidemiology/Methodology/Policy Advocacy/Statistics 8

Full course description

Philosophy of Public Health

In a lecture and two workshops, the PPH SCL will tackle the topics of public participation and the nature of expertise and knowledge.

Methodology

The methodology SCL will involve two working lectures. In the first, we will introduce the constructivist approach and we will go into three specific narrative instruments to shape a reality: narrative structure, metaphors, and numbers. Students will practice this by applying this method on a specific policy report. In the second, we will introduce participatory research and consider some examples. We will explain basic characteristics of this methodology like openness, engagement, time, flexibility, collaborative interpretation, and evaluation. You will practice this by applying this method on a specific public health problem. There will a combined open question assignment for both topics, to be completed in pairs.

Statistics

larger group of people than the observed group. In two lectures and three workshops, the students will become acquainted with simple and multiple logistic regression models.describe relationships between variables and that generalize the obtained results to a The SCL Statistics focuses on key statistical concepts and techniques that summarise and

assessment is based on a short assignment relating to the analysis of a real-life dataset.SPSS via training sessions as well as to interpret and report the findings. The final You will learn to apply logistic regression on research data using the statistical package In EPH3022, first simple logistic regression is introduced. This allows for studying the relationship between a dichotomous/binary dependent variable and one independent variable. This will be extended to multiple logistic regression analysis, which allows for studying relationships between one dichotomous/binary dependent variable and more independent variables. This extension may be needed to control for the influence that other variables may have on the association of interest (i.e. to correct for confounding).

Policy advocacy

In a series of three lectures, students will meet with the challenges of public health professionals working in policy advocacy at the European and global level.

Course objectives

The specialised competency line activities (italicised in the table) aim to further support students in developing their specific and general competencies relevant to the course Health Policies at EU Level and Global Health Europe

EPH3222 Period 2 30 Oct 2023

22 Dec 2023 Print course description ECTS credits: 2.0 Teaching methods: Lecture(s), PBL, Training(s) Assessment methods: Assignment, Attendance Fac. Health, Medicine and Life Sciences

Philosophy of Public Health part 4

EPH3241 Period 2 30 Oct 2023 22 Dec 2023 Print course description ECTS credits: 2.0 Instruction language: English Fac. Health, Medicine and Life Sciences

Thesis Proposal

Full course description

During the module EPH3023 Writing a Research Proposal, students learn how to apply the knowledge acquired during the previous modules in the Bachelor European Public Health, including the trajectories to write a research proposal for their Bachelor thesis research project. For this proposal and in consultation with their UM thesis supervisor and the placement coordinator, students (have) select(ed) their own topic, provided that the chosen topic fits with one or more key topics of the Bachelor of Science European Public Health program. During the module, students are members of a thesis group supervised by the UM thesis supervisors.

Course objectives

Expert

- Tests and defends the use of health status measures in policies and written scientific output
- Evaluates and critiques health-related public policies at Member State and EU levels
- Compares and selects methods and theories for the evaluation of public and organizational policy processes and outcomes

Investigator

- Writes a bachelor thesis with high-level but consistent supervision
- Combines theory with literature research to produce original insights relevant to public health
- Evaluates the quality and relevance of scientific evidence for public health policies and practice

- Argues coherently and logically using a range of academic thinking skills and philosophical and ethical concepts
- Matches gaps in public health knowledge with opportunities for scientific research

Communicator

- Writes a policy brief on an issue of relevance for EU policy and health
- Writes academic material at English Level C2
- Discusses topics and findings at English Level B2
- Provides constructive and insightful feedback to peers on thesis development
- Writes in a socially-responsible way that accounts for and respects social and cultural differences

Professional

- Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- Acts according to ethical standards and norms

Recommended reading

This is the link to Keylinks, our online reference list.

EPH3023 Period 3 8 Jan 2024 2 Feb 2024 Print course description ECTS credits: 6.0 Instruction language: English Teaching methods: Assignment(s), Lecture(s), Work in subgroups, Research Assessment methods: Assignment Fac. Health, Medicine and Life Sciences

Placement and Thesis

Full course description

The ability to conduct independent research and express yourself clearly in writing is an essential academic skill. Job advertisements of interest to graduates in public health frequently include 'research skills' and 'writing skills' as a requirement. In the future, you will often have to design, conduct and manage research projects, write memos, policy papers, public information brochures, meetings and research reports, publications etc. Therefore, conducting independent research and writing a thesis is vital in a public health study programme.

The public health topics, methods and methodology training, academic thinking training, and professional skills training have paved the way for the Bachelor's thesis, the programme's final

project. You have already completed papers and reports, and you are familiar with the training and guidelines given to you for writing in an academic style, conducting a literature review and referencing correctly. In this final project, you will integrate and apply your learning and knowledge from the previous 2.5 years.

Twenty weeks have been allocated for the research placement and writing the Bachelor's thesis between February and July each year. The placement is centred around independent preparation, planning and conducting academic research, which means that the student is to gain experience with conducting independent scholarly research on a Bachelor level under supervision. This is an opportunity for students to become acquainted with the art and science of research, preferably within an existing and ongoing research project. This research will be the basis for the Bachelor's thesis. The topic of the placement and the thesis must align with the B-EPH curriculum's mission and objectives and demonstrate the student's accumulated knowledge and skills.

Course objectives

Expert

- Tests and defends the use of health status measures in policies and written scientific output
- Evaluates and critiques health-related public policies at Member State and EU levels
- Compares and selects methods and theories for the evaluation of public and organizational policy processes and outcomes

Investigator

- Writes a bachelor thesis with high-level but consistent supervision
- Combines theory with literature research to produce original insights relevant to public health
- Evaluates the quality and relevance of scientific evidence for public health policies and practice
- Argues coherently and logically using a range of academic thinking skills and philosophical and ethical concepts
- Matches gaps in public health knowledge with opportunities for scientific research

Communicator

- Writes a policy brief on an issue of relevance for EU policy and health
- Writes academic material at English Level C2
- Discusses topics and findings at English Level B2
- Provides constructive and insightful feedback to peers on thesis development
- Writes in a socially-responsible way that accounts for and respects social and cultural differences

Professional

- Behaves in a respectful, professional and reliable manner in tutor groups, practicals and group work
- Acts according to ethical standards and norms

Recommended reading

Literature review • Petticrew, M., & Roberts, H. (2008). Systematic reviews in the social sciences: a

practical guide. Blackwell Publications. • Aveyard, H. (2019). Doing A Literature Review In Health And Social Care: A Practical Guide. 4th ed. Open University Press. • Page, M. J., et al. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Journal of Clinical Epidemiology, 134, 178-189. https://doi.org/10.1016/j.jclinepi.2021.03.001 Qualitative research methodology and data analysis • Polit, D.F., & Beck, C.T. (2019). Nursing research: generating and assessing evidence for nursing practice. 11th ed. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins. • Creswell, J.W. & Creswell, J.D. (2018). Research design: qualitative, quantitative, and mixed methods approaches. 5th ed. Los Angeles: Sage. • Neuman, W.L. (2011). Social Research Methods: Qualitative and Quantitative Approaches. 7th ed. Allyn and Bacon. • Green, J., & Thorogood, N. (2018). Qualitative methods for health research. 4th ed. Sage. Quantitative research methodology and data analysis • Gordis, L. (2019). Epidemiology. 6th ed. Philadelphia: Elsevier Saunders. • Rothman, K. J., Lash, T. L., VanderWeele, T. J., & Haneuse, S. (2021). Modern epidemiology. 4th ed. Wolters Kluwer. • Preston, S., Heuveline, P., & Guillot, M. (2000). Demography: Measuring and Modeling Population Processes. Wiley. • Field, A. (2018). Discovering statistics using IBM SPSS statistics. 5th ed. Sage Publications.

EPH3025 Period 4 5 Feb 2024 5 Apr 2024 Print course description ECTS credits: 30.0 Instruction language: English Coordinator:

• <u>R. Hrzic</u>

Teaching methods: Research Assessment methods: Final paper Keywords: research placement, Thesis