

Public Health Sciences Course Program

In-depth training in Public Health Sciences

For all interested PhD students and academics



Manual for Students and Lecturers
2023-24 Cohort

Public Health Sciences Course Program: Manual for Students and Lecturers

Contents

1	Course Program in short	3
2	Organization	4
2.1	Target group	4
2.2	Didactic concept	4
2.3	Admission to Course Program and registration for courses	4
2.4	Fees and cancellation policy	5
2.5	Duration	5
2.6	CST/KSL Account	5
2.7	Course platform ILIAS	6
2.8	Counselling	6
2.9	Students' journey	6
3	Structure of the PHS Course Program	8
3.1	Modules and themes	8
3.2	ECTS credits	9
3.3	Courses	9
4	Qualification framework	10
4.1	Educational objectives (Program level)	11
4.2	Competencies (Module level)	12
4.3	Learning outcomes (course level):	12
5	Requirements for program completion	13
5.1	Assessment and logbook	13
5.2	Program certification	14
5.3	Regulation and appeals	14
6	Contact	14
7	Annex A – Competencies and assessment criteria	15
8	Annex B – Logbook questions	18
9	Annex C – Recognition of previous or external learning achievements	18

This manual aims to give participants and lecturers a better understanding of the Public Health Sciences (PHS) Course Program and support participants in navigating their program paths.

1 Course Program in short

The PHS Course Program is designed for doctoral students whose research project is related to Public Health or who have a strong interest in the field. It is based on a vision of doctoral training across three layers:

- **Layer 1:** General knowledge and generic soft skills (various courses offered by the university and libraries).
- **Layer 2:** Interdisciplinary, in-depth training in PHS (**this PHS Course Program**).
- **Layer 3:** Topic-specific doctoral training (highly specialized, project-based courses in consultation with supervisors and graduate schools).

The PHS Course Program is an optional training program that complements the PhD curriculum defined by the Graduate Schools. The Course Program is not a Graduate School and does not award PhD diplomas.

The four pillars of the Course Program are:

1. **Interdisciplinarity:** Public Health is a highly interdisciplinary field, which is reflected in the structure of the Course Program. Lecturers and participants from different faculties are involved in the program.
2. **Comprehensive Public Health Vision:** A global understanding of the Public Health Sciences and applying their methods is at the program's center. Learning processes promote engagement with the content to transfer knowledge into action. Lecturers work with modern didactic methods and promote competencies in small groups. Exemplary contents have priority.
3. **Networking:** Through the interdisciplinary structure of the program and organized networking activities, participants and professors can build lasting connections, including with alums. Participants have access to courses offered by universities abroad where they can broaden their network.
4. **Flexibility:** The program structure enables adaptation to the other PhD work requirements. Entry is possible any time after starting with the PhD at the University of Bern. Participants design their study plan consisting of mandatory and elective courses based on their previous education. Before starting, new participants discuss their study plan with their PhD supervisors and the Program Manager.

The PHS Course Program is aligned with [the Agency for Public Health Education Accreditation \(APHEA\)](#) criteria. The competency framework and requirements of the Course Program are based on these standards. In accordance with higher education regulations, the program completion is based on attaining ECTS credits.

2 Organization

2.1 Target group

The PHS Course Program is primarily aimed at interested PhD students at the University of Bern. PhD students from other Universities and scientific staff are admitted on a case-by-case basis. Any PhD student or scientific staff can register for individual courses without enrolling in the Course Program. The program manager decides on the final admission. Priority is given to PhD students at the University of Bern.

2.2 Didactic concept

The program focuses on methodological aspects and their application in the themes of population health and its determinants, health promotion and prevention, and health systems and policy, using different formats, including digital and attendance-based formats. Building on their learning experiences, the participants acquire knowledge and skills relevant to Public Health theories, concepts, and methods. The assessment of competence achievement will be based on the educational objectives and allow students to demonstrate new skills and knowledge in a helpful way. Finally, students will document progress in a Logbook where competencies are summarized and critically reflected.

2.3 Admission to Course Program and registration for courses

Students who want to enroll in the program must first register for Module 1 of the Course Program and then register for individual courses within Module 2. Registration for Module 2 courses is possible after completing Module 1. Students who started their doctorate before 2023 can credit previously taken courses towards the PHS Course Program. They can also register for individual courses if they only need a few courses to complete their doctoral training. Please get in touch with us to discuss options and course choices (see details for the transition phase on the [website](#)). Registration is possible online. At enrolment in the Course Program, applicants will be invited to a short meeting with the Program Manager to discuss individual course planning, expectations, and open questions.

PhD students, post-docs, or other interested parties not enrolled in the full PHS Course Program can register online for single courses. Module 1 counts as a single course. After registration, the Program Manager may contact the applicant to discuss the course's suitability to ensure the level of competencies is sufficiently homogenous between participants.

A regularly updated list of courses is available online at www.medizin.unibe.ch/phs with the link to the online registration (www.zuw.me/phs-ispm).

2.4 Fees and cancellation policy

The cost structure distinguishes between the following groups.

1. For PhD students at the University of Bern and University Hospital Bern registrations fees for PHS courses are waived (special cancellation conditions apply).
2. Post-docs at the University of Bern: CHF 100 per ECTS.
3. Other scientific staff, University of Bern and University Hospital Bern: CHF 300 per ECTS.
4. Participants from other academic institutions: CHF 600 per ECTS.
5. Other participants: CHF 840 per ECTS.

There is a discount per ECTS for other scientific staff, University of Bern (CHF 250 per ECTS) and for participants from other academic institutions (CHF 500 per ECTS), if they commit to whole PHS course program attendance. If a course is booked out, priority is given to PhD students from University of Bern doing the full PHS course program.

For Program participants, the fees include individual counselling at the start, course materials, assessment feedback and other documents showing learning progress, program attestation and networking offers. For the single course(s) participants, the rates include course materials and a course attestation with ECTS. Pricing may change; the current fees can be found on the website. For details, see the document "[PHS fees participants](#)".

Course attendance must be cancelled by email to phs-admin.ispm@unibe.ch at the latest two weeks before the start of the course. The course administration will confirm the cancellation.

Special cancellation conditions apply to PhD students at the University of Bern and University Hospital Bern: processing fee of CHF 100 is applied to cancellations less than two weeks before the start of the course (late cancellations), to participants with course attendance of less than 80% of the on-site course time, absence on the first day of the course is considered as a late cancellation. Excluded are cancellations due to the student's illness or the illness of dependents, provided that a doctor's certificate is presented. For details, please see document "[Terms and conditions](#)".

2.5 Duration

The PHS Course Program should be completed within three years, ideally starting soon after the beginning of the PhD. An extension for a further year is possible upon written request. The Program Manager confirms the completion of the program. The Program Manager must be informed about prolonged absences (e.g., due to a longer stay abroad, pregnancy, family leave, etc.).

2.6 CST/KSL Account

PHS Course Program participants registered at University of Bern can manage their PHS courses within the Core Teaching System [CTS](#) (Kernsystem Lehre, KSL). The system will give participants an overview of their completed courses (including details of ECTS earned). The Course Program administration manages the relevant courses in CTS. Students must keep their records up to date.

2.7 Course platform ILIAS

[ILIAS](#) is the central teaching and learning platform of the University of Bern. Participants and lecturers of the PHS Course Program receive a dedicated ILIAS account with a personalized login. In addition to the course and Module materials, supplementary information is accessible on the learning platform, e.g., guidelines, in-depth literature, Logbook templates, etc. Collaborative tools are also available on the platform. Lecturers oversee uploading all necessary course materials. After admission to the Course Program, participants will receive an e-mail with the link to the ILIAS login. Students must make sure they fulfil the requirements of their learning process. They must download all materials related to their achievements in the program before ILIAS access ceases after the end of the course (2 months after last course day).

2.8 Counselling

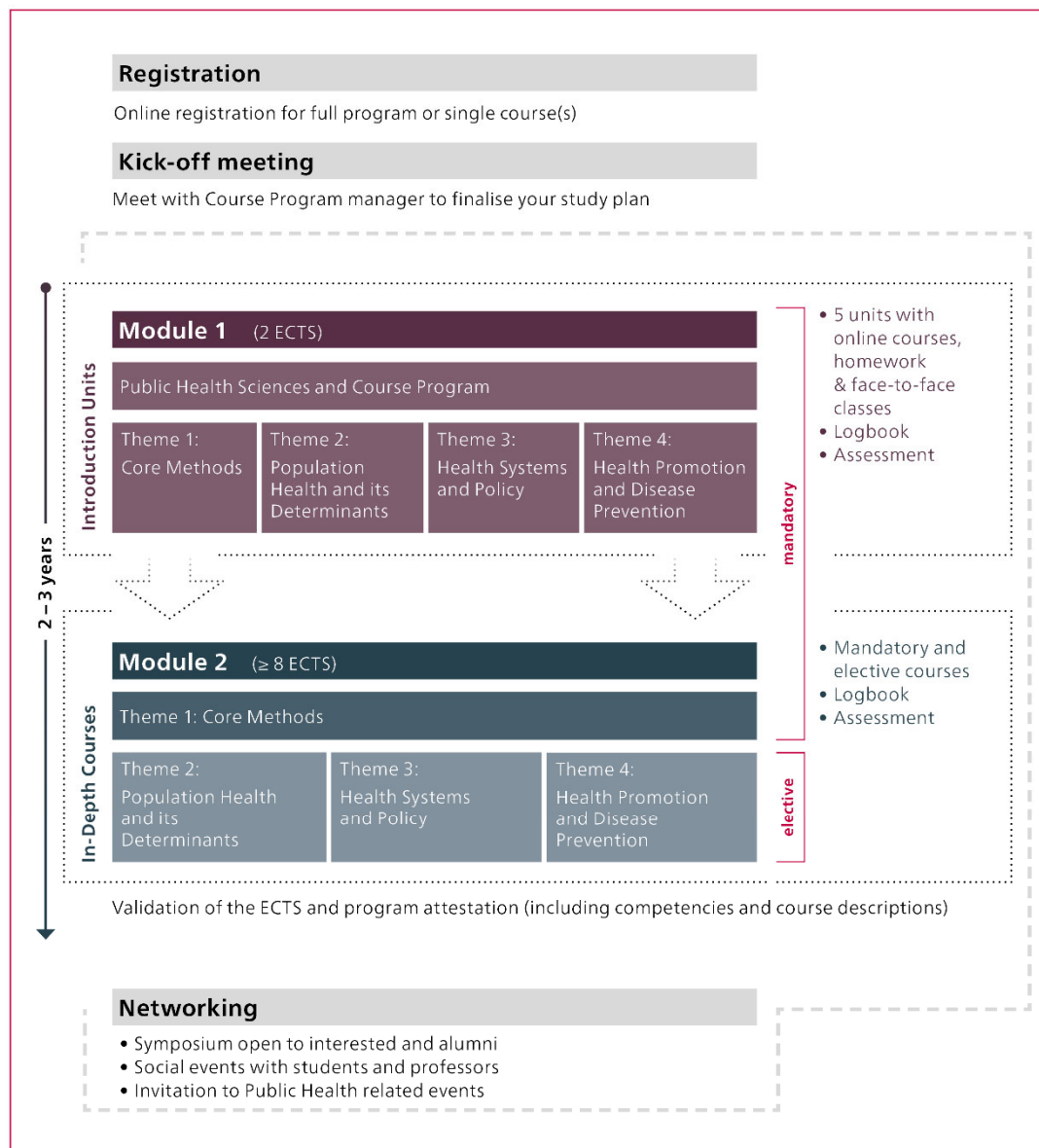
The Program Manager advises and supports participants in planning their curriculum and is the primary contact person for all questions concerning the Course Program. Participants get personalized study counselling to find their way through the Course Program.

2.9 Students' journey

The students' journey from registration to the validation of the ECTS and the program attestation is summarized in Figure 1.

Figure 1. Graphic representation of the students' journey through the program.

PHS Course Program – Students journey



3 Structure of the PHS Course Program

3.1 Modules and themes

The program consists of two Modules subdivided into four themes (Figure 1):

- **Module 1** – Consists of 5 units: an Introduction to Public Health Sciences, the Course Program, and an introduction to each of the four themes: Core Methods, Population Health and its Determinants, Health System and Policy, Health Promotion and Disease Prevention (2 ECTS).
- **Module 2** – Consists of in-depth courses within the four themes (≥ 8 ECTS).

Participants must start with Module 1 and should complete all five introductory units before embarking on Module 2. In Module 2, courses within theme 1 “Core Methods” need to be selected. Additionally, students must choose courses from at least one other theme (out of themes 2 to 4). For each theme, if they wish, students can choose more than one additional course and attain more than 8 ECTS in Module 2.

Through Module 1, participants get an overview of the foundations of Public Health, the definitions of key concepts, its different disciplines, history and ethics, and an introduction to the four themes. Through Module 2, participants acquire specific skills across the four themes:

1. Core methods (Module 1 and 2)
 - a. Epidemiology and demography
 - b. Social Sciences research methods
 - c. Statistical and computational methods
 - d. Evaluation and implementation
2. Population health and its determinants (Module 1 and 2)
 - a. Socio-economic determinants
 - b. Environmental and biological hazards
 - c. Nutrition
 - d. Life course
 - e. Global and One Health
 - f. Genetics
3. Health care systems and policy (Module 1 and 2)
 - a. Health policy
 - b. Health law
 - c. Health care systems
 - d. Perspectives in health care research
4. Health promotion and disease prevention (Module 1 and 2)
 - a. Participatory research
 - b. Behaviour change
 - c. Knowledge transfer tools

3.2 ECTS credits

Students must acquire a minimum of 10 ECTS credits to complete the PHS Course Program:

- Module 1: 2 credits
- Module 2: ≥8 credits

The minimum workload for the entire program is approximately 300 hours (1 credit ≈25-30h) over three years, with Module 1 contributing about 50 hours. Participants have the flexibility to earn credits with the courses that are most helpful to them. In addition to the minimum credit requirements, participants may take additional courses at their discretion. These can be recognized as further learning achievements in the Attestation Supplement generated from CST/KSL.

The table below shows the ECTS distribution for the PHS-Program. Assessments are done at the Module level, and the time required is included for the ECTS for each Module.

Module 1: 2 ECTS (50-60h) (5 mandatory introduction units)		Module 2: min 8 ECTS (200-240h) (mandatory & optional in-depth courses)	
Online (5*60-90 Min ~5-6h)		Theme 2: Core Methods	3-4.5 ECTS
F2F/ Zoom (5*2h~10h)		Additional theme	2-3.5 ECTS
Homework (5*3h = 15h)	1 ECTS		
<i>Learning progress: exam and logbook, ~20-23h:</i>		<i>Learning progress: exam and logbook, ~25-30h:</i>	
Oral <u>exam</u> (preparation + presentation, 15h)	0.5 ECTS	Oral <u>exam</u> (preparation & presentation, 15h)	0.5 ECTS
<u>Logbook</u> (resumé & reflect M1, 2-4 pages, 5-8h)		<u>Logbook</u> (resume, reflect + write quintessence M1 + M2, 8-10pages, 15h)	0.5 ECTS
Theme 1 intro (extra work 5h)	0.5 ECTS		
Total (55h)	2 ECTS	Total	min 8 ECTS

3.3 Courses

The PHS Course Program consists of courses designed specifically for the PHS Program or existing courses offered at participating institutions that fit the program. The latter include the [Swiss Epidemiology Winter School](#) organized by ISPM, online courses at the [University of Bristol](#) Medical School and courses given in Rotterdam at the [Erasmus Summer Programme](#). The Program Manager and the group leaders for the four themes will further develop and continually optimize the course offer.

Some courses in Module 2 will be offered on a two-year cycle. Participants should plan and choose courses in advance.

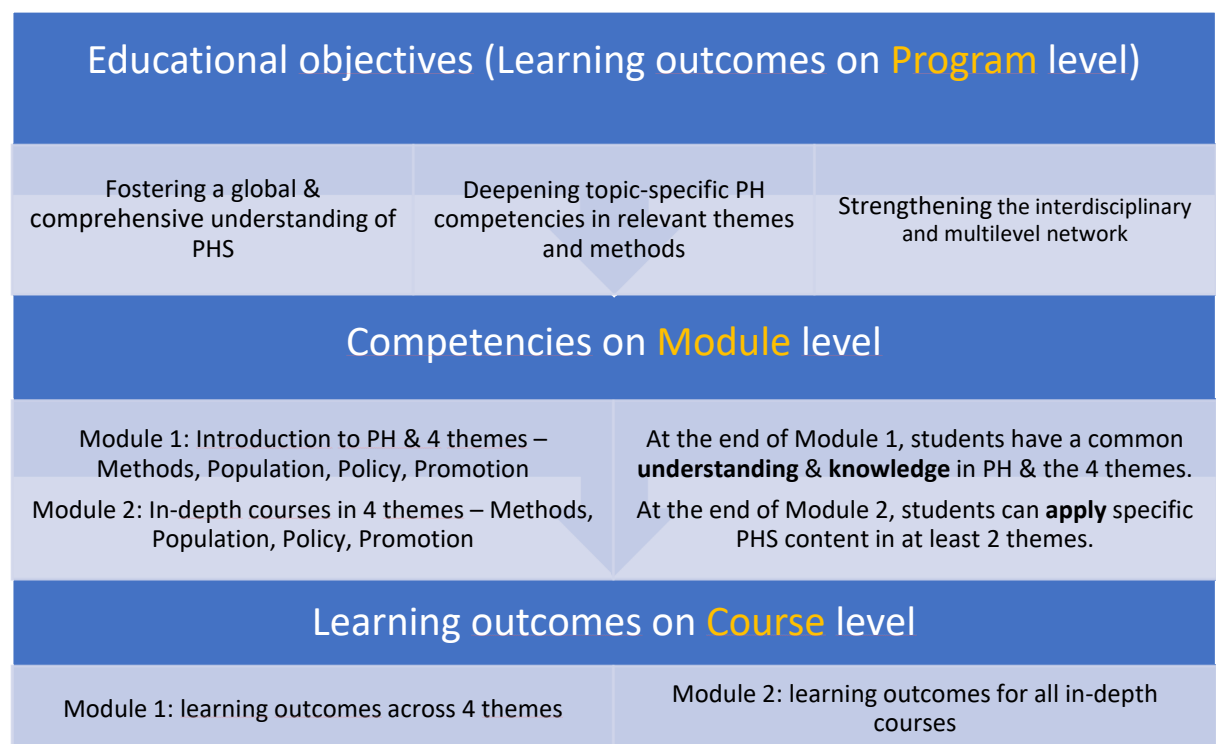
The courses will be taught in English, held face-to-face at participating institutions, or offered online. Participants will be informed promptly about the content, learning outcomes, preparation work required, and teaching and working methods.

4 Qualification framework

The PHS Course Program is based on a qualification framework with competence goals. The qualification framework represents the overall educational objectives of the Program. The overall objectives feed into competencies that are defined at the Module level. These Module competencies are acquired by achieving the learning outcomes of the various courses. The qualification framework reflects the central competencies of future post-doctoral researchers in the field of Public Health.

The Course Program content and structure are informed by the “[Core Competencies for the Public Health Professional](#)” of the Agency for Public Health Education Accreditation ([APHEA](#), nested in the Association of Schools of Public Health in the European Region). The list was adapted for the PHS Course Program, emphasizing PhD-specific scientific competencies and skills while maintaining a broad range of topics. The Course Program attestation documents the acquisition of these competencies.

Figures 2a and 2b. Qualification framework (short and longer version)



Qualification framework

Public Health Sciences Course Program

Program level: educational objectives

- Module 1: The educational objective for the introductory courses is to foster a global understanding of Public Health Sciences. At the end of Module 1, participants can demonstrate their knowledge and understanding of PHS and the 4 theme areas.
- Module 2: The educational objective for the in-depth courses is to deepen topic-specific Public Health Sciences competencies and methods. At the end of Module 2, participants can apply, analyse, and evaluate specific PHS information and create new work in at least 2 themes (one being Core Methods).

Module level: competencies Module 1 & Module 2

Module 1

Knowledge & understanding in PHS

Students can:

- Describe the scope and history of Public Health and its sciences and the main definitions / concepts / methods.
- Describe key methods, concepts and current topics, relevant to population health and its determinants; health care systems and policy; health promotion, protection, and disease prevention.
- Establish connections between themes and draw parallels in relation to their own field of work.
- Illustrate their perspectives on Public Health Sciences after having met national and international Public Health leaders.
- Explain the principles of Public Health ethics and acting with integrity and relate to their own field of work.

Module 2

Application of specific PHS content with focus on methods

Students can:

- Interpret the main study designs used in the Public Health Sciences and apply them to their research.
- Analyse key quantitative and qualitative methods and apply to their research, where appropriate.
- Analyse and assess the methods used to address questions in population health and its determinants; or health care systems and policy; or health promotion, protection and disease prevention.
- Critically reflect and discuss current topics, challenges and theories in population health and its determinants; or health care systems and policy; or health promotion, protection, and disease prevention, the state of research, and their own work in these areas.
- Propose ideas to push Public Health Sciences topics (challenges) and how to use their interdisciplinary networks.

Course level: learning outcomes

4.1 Educational objectives (Program level)

Module 1: The educational objective for the introductory courses is to foster a global understanding of Public Health Sciences. At the end of Module 1, participants can demonstrate their knowledge and understanding of PHS and the four theme areas.

Module 2: The educational objective for the in-depth courses is to deepen topic-specific Public Health Sciences competencies and methods. At the end of Module 2, participants can apply, analyze, and evaluate specific PHS information and create new work in at least two themes (one being Core Methods).

4.2 Competencies (Module level)

Table 3. Competencies on module level.

Module 1	<p>Based on teaching activities within the 5 themes, participants can:</p> <ul style="list-style-type: none">• Describe the scope and history of Public Health and its sciences and the main definitions /concepts /methods.• Describe key methods, concepts, and current topics, relevant to population health and its determinants; health care systems and policy; health promotion, protection, and disease prevention.• Establish connections between themes and draw parallels in relation to their own field of work.• Explain the principles of Public Health ethics and acting with integrity and relate to their own field of work.
Module 2	<p>Based on the courses within theme 2 ‘core methods’ and the chosen second theme, participants can:</p> <ul style="list-style-type: none">• Interpret the main study designs used in the Public Health Sciences and apply them to their research.• Analyze key quantitative and qualitative methods and apply them to their research, where appropriate.• Apply, analyze, and assess the methods used to address questions in population health and its determinants; or health care systems and policy; or health promotion, protection, and disease prevention.• Critically reflect and discuss current topics, challenges and theories in population health and its determinants; or health care systems and policy; or health promotion, protection, and disease prevention, the state of research, and their own work in these areas.• Propose ideas to push Public Health Sciences topics (challenges) and how to use their interdisciplinary networks.

4.3 Learning outcomes (course level):

Learning outcomes are defined specifically for each course and are nested in the competencies set at the Module level.

5 Requirements for program completion

The modules are completed as soon as all the relevant courses have been attended, the assessment is accepted, and the Program Manager has validated the logbook.

- Module 1 and 2: Course attendance and tasks are fulfilled (min 80%),
- Module 1: Oral presentation (exam based on Module 1 competencies)
- Module 2: Oral presentation (exam based on Module 2 competencies)
- Completed Logbook for Modules 1 and 2

Once all the elements are complete, the participants notify the Program Manager to verify that all the requirements are met. Finally, the participant receives the PHS Course Program attestation.

5.1 Assessment and logbook

The assessments and learning logbook document the critical and reflexive application of the knowledge and skills acquired in the two Modules. The time invested in the assessment is proportional to the Module length and serves as proof of competence, meaning that participants show their acquisition of learning outcomes. The primary goal is to demonstrate in-depth understanding, transfer and application in the student's context and practice. The logbook represents the documentation and reflection on the participants' learning journey.

Module 1: demonstrate knowledge and understanding:

- Ungraded oral exam (15-20 Minutes) with Program Manager and one leader of a theme group
- Preparation based on: [Module 1 competencies](#) plus logbook with the quintessence of participants' learning journey
- Assessment criteria: [Module 1 competencies \(as described on page 12\)](#)

Module 2: demonstrate the transfer of knowledge (application, analysis, evaluation)

- Ungraded presentation (15-20 Minutes)
- Preparation based on: [Module 2 competencies](#) plus logbook with the quintessence of participants' learning journey
- Assessment criteria: [Module 2 competencies \(as described on page 12\)](#) and quintessence of Module 2 applied to own field of work.

Logbook: resume content and reflect

- Documents participants' takeaway lessons and shows their reflections along the learning journey, building the bridge between units within Modules, courses and their field of PhD study or work activities.
- After Module 1 (2-4 pages) and
- After Module 2 (8-10 pages)
- The logbooks should be mailed three weeks after finishing the respective Module.

5.2 Program certification

During their “kick-off” meeting with the Program Manager, participants are informed about the three elements of the assessment (see chapter 5.1) to obtain the PHS Course Program certification. The Program Manager is the main person of contact to ensure successful Program completion. The Program Manager sends confirmation that the assessments have been passed and provides feedback. To keep track of their achievements, participants and the PHS administration follow the completed courses in the KSL. The certificate is issued as soon as the elements of the learning progress are all achieved.

Feedback after finishing all assessment elements is given, the content of the assessments will be treated confidentially.

The Institute for Social and Preventive Medicine (ISPM) presents the successful participants with an attestation of the “Public Health Sciences Course Program”.

5.3 Regulation and appeals

The basis for the PHS Course Program is the acceptance of this manual by the ISPM responsible for the PHS Course Program (Matthias Egger) and the leaders of the theme groups. For 2023 decisions by the Program Manager, participants can appeal to the ISPM Management within 30 days of knowledge of the decision.

6 Contact

If you have questions about the PHS Course Program or on how to proceed or would like advice on planning your courses, you can contact us to make an appointment.

PHS Program Team at ISPM:

- Matthias Egger – Program Responsible
- Viktorija Rion – Program Manager
- Caroline Siegrist – Program Administration

University of Bern, ISPM, PHS Course Program, Mittelstrasse 43, 3000 Bern

E-mail: phs-admin.ispm@unibe.ch

Website: <http://medizin.unibe.ch/phs>

Direct link to upcoming courses: <https://zuw.me/phs-ispm>

LinkedIn: www.linkedin.com/company/public-health-sciences

7 Annex A – Competencies and assessment criteria

Oral Exam Module 1 competencies: Focus on knowledge and understanding

Based on teaching activities within the 5 themes, participants can:

- Describe the scope and history of Public Health and its sciences and the main definitions, concepts, and methods.
- Describe key methods, concepts, and current topics, relevant to population health and its determinants; health care systems and policy; health promotion, protection, and disease prevention.
- Establish connections between themes and draw parallels in relation to their own field of work.
- Explain the principles of Public Health ethics and acting with integrity and relate to their own field of work.

1. Public Health related terms are used correctly.
2. The concepts /models are correctly presented in own words.
3. The selection of presented content is justified by the competencies.
4. Connections between themes and to own PhD context is described.
5. The language is clear and understandable.

criteria	indicator	0 points	1 point	2 points
content	Public Health related terms are used correctly.	O	O	O
	The concepts /models are correctly presented in own words.	O	O	O
transfer	The selection of presented content is justified by the competencies.	O	O	O
	Connections between themes and to own PhD context is described.	O	O	O
formal	The language is clear and understandable.	O	O	O
	The content is presented in a structured manner	O	O	O

The assessment is considered to have been passed, if at least one point is achieved for each criterion, or at least 6 points in total (50%).

Oral Exam Module 2 competencies: Focus on transfer

Based on the compulsory courses within theme 1 'Core Methods' and the chosen courses in other themes, participants can:

- Interpret main **study designs** used in the Public Health Sciences and apply them to their research.
- Analyze key **quantitative** and **qualitative methods** and apply to their research, where appropriate.
- Apply, analyze, and assess the **methods** used to address questions in population health and its determinants; or health care systems and policy; or health promotion, protection, and disease prevention.
- Propose ideas to push Public Health Sciences topics (challenges, address blind spots) and how to use their interdisciplinary **networks**.

1. Public Health Sciences related terms and methods are used correctly.
2. The concepts /models are correctly applied and described in own words.
3. The selection of presented content is justified by the competencies.
4. Concepts/models/methods are used appropriately and are adapted to own PhD context.
5. Ideas of implementation into own PhD context is described.
6. The language is clear and understandable.

criteria	indicator	0 points	1 point	2 points
content	Public Health related terms are used correctly.	O	O	O
	The concepts /models are correctly presented in own words.	O	O	O
transfer	The selection of presented content is justified by the competencies.	O	O	O
	Concepts/models/methods are used appropriately and are adapted to own PhD context.	O	O	O
	Ideas of implementation into own PhD context is described.	O	O	O
formal	The language is clear and understandable.	O	O	O

The assessment is considered to have been passed, if at least one point is achieved for each criterion, or at least 6 points in total (50%).

Logbook for Modules 1 and 2: Focus on reflection and documentation

Points to answer in logbook

- Brief summary of the Module.
- Questions that remained open / topics that I still want to research.
- Transfer: approaches or tools that could be useful for me academically
- Lessons learned: my take-home notes
- Notes to myself: ex. Literature, Websites, ideas, tools, contacts
- Additionally for Module 2: Quintessence of learning insights (basis for oral exam)

1. All questions are replied to in an appropriate manner.
2. The reflections on transfer and lessons learned are presented and justified.
3. Subjective interpretations are put into an evidence-based perspective.
4. Consequences for own PhD work are formulated.
5. Each document has minimum 2-4/ 8-10 pages.

Criteria	Indicator	0 points	1 point	2 points
content	All questions in the template are replied to in an appropriate manner.	0	0	0
transfer	The reflections on transfer and lessons learned are presented and justified.	0	0	0
	Subjective interpretations are put into an evidence-based perspective.	0	0	0
	Consequences for own PhD work are formulated.	0	0	0
formal	Each document has minimum 2-4/ 8-10 pages.	0	0	0

The assessments are considered to have been passed if at least one point is achieved for each criterion, or at least 5 points in total (50%).

8 Annex B – Logbook questions

The template for the Logbook document will be accessible on ILIAS. A timely submission is expected after finishing the Module. Module 1: 2-4 pages and Module 2: 8-10 pages. Points to be answered:

1. Brief summary of the Module.
2. Aspects, on which I learned the most.
3. Questions that remained open / topics that I still want to research.
4. Transfer: approaches or tools that could be useful for me academically.
5. Lessons learned – my take-home notes.
6. Notes to myself (ex. Literature, Websites, ideas, tools, contacts)

9 Annex C – Recognition of previous or external learning achievements

Public Health related courses from other tertiary institutions or SSPH+ can be validated for the PHS Course Program.

The completed learning activity, where ECTS are wished to be recognized should:

- a) be available in the form of a course attestation with proof of the academic achievement (learning outcomes) and the amount of ECTS credits.
- b) be demonstrably related to the contents of the PHS Course Program.
- c) was carried out on a comparable PhD level.
- d) is not more than 5 years old.

After submission of the documents, the Program Manager decides about the recognition of ECTS. It should be noted that the recognition of ECTS credits from other courses leads to additional administrative and does not lead to price reductions in the course fees!