2026

PLANETARY HEALTH
CORE CURRICULUM

FOR HEALTH STUDENTS
IN SWITZERLAND

FROM KNOWLEDGE
TO TRANSFORMATIVE ACTION
FOR HEALTH EQUITY
WITHIN PLANETARY BOUNDARIES

SUMMARY

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www.phuse.ch

PHUSE
Planetary Health
Education

SMIFK : CIMS

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CURRICULUM OVERVIEW

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81 LEARNING OUTCOMES

based on the six-step approach by Thomas et al. (2022)

structured in 4 chapters:

01 Planetary Health Challenges

02 Sustainable and Resilient Healthcare

03 Co-Benefits, Health Promotion and Prevention

04 Planetary Health Advocacy and Action

a national competency-based, interdisciplinary framework

TARGET GROUP

BACHELOR & MASTER STUDENTS OF SWISS HEALTH PROFESSIONS:

incl. human medicine, nursing, midwifery, physiotherapy, nutrition and dietetics, health promotion and prevention, osteopathy, occupational therapy, biomedical laboratory diagnostics, optometry and medical-technical radiology

broad applicability with flexibility for local adaptation

DEVELOPMENT

NATIONAL NEEDS ASSESSMENT

swissuniversities funds a national initiative to advance Planetary Health education and stakeholder survey with +50 responses underlines need for alignment and quality standard

the Swiss health system is the most resource intensive worldwide & contributes substantially to national greenhouse gas emissions (*Andrieu et al. 2023*)

INTERNATIONAL FRAMEWORKS

first draft based on:

- AMEE Consensus Statement on Planetary Health
- PHA Education Framework
- GCCHE Core Competencies
- and many others

STAKEHOLDER-DRIVEN DEVELOPMENT

further refinement through interdisciplinary working group of students and teachers from diverse Swiss universities, series of workshops for curricular co-creation involving students, educators, faculty and health professionals and a community consultation with the PHUSE network

QUALITY ASSURANCE & VALIDATION

review of Advisory Board with national & international experts and mapping with PROFILES 2

formal endorsement through Swiss Health Conference (FKG/CSS) and Joint Commission of Swiss Medical Schools (SMIFK/CIMS)

TRANSFORMATIVE EDUCATION

Based on UNESCO's Education for Sustainable Development Roadmap and the 'Health Advocate' role of the CanMEDS model, intended learning outcomes cover all 3 levels of change:

MICRO LEVEL:
Learners can reduce their ecological footprint and change to more sustainable behaviour. These often have health co-benefits e.g., active transport, plant-rich diets. For health professionals, this level also includes patient counselling and effective communication to motivate such behaviour.

MESO LEVEL:
Learners can use their societal roles, e.g. as health professionals to advocate for changes beyond the individual level. Actions include supporting active and public transport to the workplace or healthy food service in the institution.

MACRO LEVEL:
Health professionals can engage in public and political discourse, advocate for climate-resilient health systems, sign petitions, talk to politicians, participate in direct democracy etc.

IMPLEMENTATION

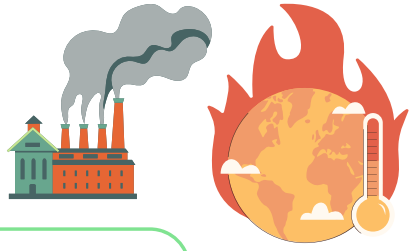
SPIRAL CURRICULUM APPROACH:
Horizontal integration across existing courses and longitudinal throughout all years of study, with increasing depth over time.

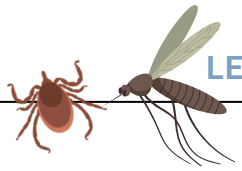
BLENDED EDUCATIONAL STRATEGY:
National modular e-learning combined with local, in-person transformative teaching focused on critical reflection, interprofessional collaboration and action-oriented learning.

LOCAL IMPLEMENTATION WITH NATIONAL SUPPORT:
Universities retain responsibility for implementation, supported through faculty development workshops and the PHUSE network. Monitoring through curriculum mapping, stakeholder feedback and annual PHRC evaluations.

TRANSFORMATIVE ASSESSMENT:
Emphasis on competency-based, longitudinal assessment (e.g. portfolios, advocacy projects, reflective practice), evaluating critical and systems thinking and the ability to translate knowledge into action rather than factual recall alone.

1. PLANETARY HEALTH CHALLENGES





LEARNERS WILL BE ABLE TO:

KNOWLEDGE

1.1.1. Explain the framework of Planetary Health, its key ideas and how it relates to converging concepts[1].

[1] e.g. One Health, EcoHealth, Global Health.

1.1.2. Describe the planetary boundaries and the concept of climate tipping elements.

1.1.3. Illustrate the impacts of human activity on ecosystems[2] and describe the concept of the Great Acceleration.

[2] e.g. biodiversity loss, pollution, land use/cover change, nutrient overloading, climate change, resource scarcity and marine degradation.

1.1.4. Analyse hazards related to climate[3], pollution and biodiversity loss and explain their mechanisms of impact on population health[4] and the health of other species[5], connecting these impacts to their future professional context.

[3] e.g. extreme weather events, heat, sea level rise, air pollution, vector distribution and ecology, water scarcity and reduced food production.
[4] e.g. the correlation between environmental degradation, the associated lack of resources, armed conflict, war and gender-based violence.
[5] e.g. antimicrobial resistance, zoonotic disease, mass extinction.

1.1.5. Analyse the direct and indirect health impacts of planetary crises[6], explain why some populations are more vulnerable than others[7] and evaluate the implications for professional practice, including gaps in current professional education and training.

[6] e.g. injury and mortality from extreme weather events, heat-related illness, respiratory illness, zoonoses, water-, vector- and food-borne diseases, non-communicable diseases, anti-microbial resistance, allergies, mental and psychosocial health and impacts on healthcare facilities and health systems.
[7] e.g. women and girls, elderly, chronically ill or marginalised people.

1.1.6. Explain the social, ecological and commercial determinants of health and apply this framework to a relevant Planetary Health case.

1.1.7. Describe and apply systems thinking tools[8] to analyse root causes of Planetary Health challenges.

[8] e.g. the iceberg model for systems change.

1.1.8. Explain the socio-political and economic drivers of the Anthropocene[9] and their implications for health equity.

[9] e.g. globalisation, extractivism, (neo-)colonial dependencies, neoliberal growth paradigm.

1.1.9. Discuss how historic emissions of overconsumption and colonial resource extraction have produced disproportionate health burdens for marginalised groups and most affected people and areas, applying intersectionality and decolonial frameworks.

1.1.10 Outline the role of international and national politics, governance mechanisms[10] and health professionals in addressing Planetary Health challenges.

[10] e.g. UNFCCC Paris Agreement, the Nationally Determined Contributions, the WHO ATACH initiative or participatory decision-making processes such as Citizens' Assemblies.

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ATTITUDES

1.2.1. Articulate their own sense of ethical responsibility as a future health professional in the face of ecological crises, including any tensions or uncertainties this raises.

1.2.2. Discuss the tension between principles of equity, solidarity and intergenerational and interspecies justice and the constraints of their professional practice, articulating where they would prioritise and why.

1.2.3. Engage with non-biomedical knowledge systems (e.g. Indigenous or non-western) and reflect how they challenge assumptions about health and their professional role and articulate concrete implications for their professional practice.

1.2.4. Reflect how relational worldviews[11] challenge assumptions in their training and reframe human health as inseparable and interdependent from the more-than-human world and articulate how this confrontation shifts their professional self-understanding.

[11] e.g. Indigenous worldviews, salutogenesis, Planetary or One Health.

1.2.5. Practise perspective-taking by engaging with the documented or lived experience of marginalised or vulnerable groups affected by planetary crises and perceive how this shifts their professional approach.

SKILLS

1.3.1. Communicate the health impacts of environmental crises effectively to patients, clients, colleagues, policymakers and the public, using audience-tailored strategies that consider health literacy, cultural context and values.

1.3.2. Critically evaluate scientific evidence on Planetary Health for accuracy, interpret findings, identify and understand biases and their relation to policy.

1.3.3. Critically evaluate information for accuracy, identify and counter disinformation and apply evidence-informed public communication strategies on Planetary Health across traditional and digital media for diverse audiences.

1.3.4. Integrate systems thinking into professional problem-solving and decision-making.

1.3.5. Identify and manage environment-sensitive conditions[12] and integrate environmental risks into clinical or professional decision-making.

[12] e.g. heat-related illness, respiratory or vector-borne disease.

ACTIONS

1.4.1. Examine an assumption embedded in their prior education or professional training that may conflict with Planetary Health principles, articulate its source and commit to concrete changes in their professional practice as a result.

1.4.2. Analyse cases from their future professional context (real or simulated) and identify how planetary crises affect the health of a specific patient or community, including implications for their own professional role and responsibilities.

1.4.3. Process their emotional responses to ecological crises in a structured collective setting, articulate how these connect to their professional responsibility and identify actions they are prepared to take as a result.

2. SUSTAINABLE AND RESILIENT HEALTHCARE

LEARNERS WILL BE ABLE TO:

KNOWLEDGE

2.1.1. Describe the environmental footprint of healthcare systems in different contexts, identify its main emission sources and explain the main drivers of unsustainable health care practices and overtreatment.

2.1.2. Explain the principles of resilience, robustness, sufficiency and sustainable healthcare, including health promotion, prevention, low-carbon and low-intervention care and apply them to their professional context[1].

[1] *e.g. by applying the Sustainability in Quality Improvement framework or a Life Cycle Assessment.*

2.1.3. Evaluate sustainable prevention, health promotion and healthcare practices[2] for feasibility in their professional context, identifying institutional obstacles to implementation.

[2] *e.g. deprescribing, green and social prescribing, low-intervention care, smarter medicine, low-carbon alternatives.*

2.1.4. Explain the principles of emergency preparedness and disaster risk reduction in health systems and identify environment-related hazards for the functioning of health systems, including impacts on service delivery, infrastructure and supply chains.

2.1.5. Discuss the role of ethical and sustainable procurement, waste reduction, resource stewardship and supply chain responsibility in healthcare.

2.1.6. Describe Swiss and international organisations and initiatives contributing to Planetary Health and analyse whether and how they contribute to the socio-ecological transformation.

2.1.7. Outline challenges of social sustainability in the health workforce (e.g., burnout, equity, working conditions) and the implications on the overall health system's resilience.

2.1.8. Explain the salutogenic framework and contrast it with the pathogenic orientation of conventional health policy and healthcare, identifying its implications for sustainable and person-centred care.

ATTITUDES

2.2.1. Work effectively with other professions across disciplines and sectors to address Planetary Health challenges and reflect on power dynamics, tensions, productive possibilities and their contribution to collaborative, respectful practice.

2.2.2. Confront the ethical complexity of providing care under environment-related disruptions and resource constraints and articulate how sustainable healthcare aligns with excellent care.

2.2.3. Sustain a commitment to protecting vulnerable populations disproportionately affected by climate-related events by identifying concrete ways their future professional decisions will reflect this commitment[3].

[3] *e.g. by effectively screening and providing initial support for individuals affected by gender-based violence.*

2.2.4. Examine their own understanding of high-quality care for gaps in sustainability and equity and articulate concrete changes to their reasoning and decision-making which could lead to better, more sustainable and equitable care.

2.2.5. Examine their own procurement, prescribing and treatment assumptions for environmental and equity implications and articulate specific changes they are committed to make.

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SKILLS

2.3.1. Apply principles of sustainable healthcare in clinical reasoning and practice, critically evaluate decisions for their environmental and social impacts and propose evidence-informed alternatives.

2.3.2. Identify a procurement or supply chain practice within a known health institution and develop and present a concrete sustainability proposal, addressing structural barriers to change.

2.3.3. Apply basic principles of emergency preparedness in clinical or community settings, including recognizing and responding appropriately to environment-related health risks.

2.3.4. Adapt clinical decision-making and care delivery in the context of resource constraints, disrupted infrastructure or increased patient demand during environment-related events.

2.3.5. Communicate effectively with patients, clients, colleagues and communities before, during and after environment-related events, including risk communication and health protection advice (e.g. during heat waves, pandemics) under conditions of uncertainty, ambiguity and evolving evidence.

2.3.6. Act as agents of change by engaging with interprofessional, transdisciplinary and community-based initiatives and modelling sustainable and resilient practices within their professional network and institutions.

2.3.7. Formulate a research question relevant to a Planetary Health challenge in their professional field and apply principles of sustainable and equitable research practice in its design.

ACTIONS

2.4.1. Identify a practice, process or policy within a prevention, health promotion or healthcare setting that contributes to environmental degradation or system vulnerability[4] and propose a feasible alternative that improves sustainability or resilience while maintaining or improving quality of care[5].

[4] *e.g. resource use, procurement or care pathways.*
[5] *e.g. for clinical setting discontinuing use of desflurane or launching a 'gloves-off' campaign.*

2.4.2. Identify a structural feature of the health system or institution they are trained within that inhibits sustainable practice or resilience and initiate or propose one specific meso-level action to challenge it, documenting what resistance or support they encounter.

2.4.3. Analyse a climate-related disruption scenario[6] and reflect on how their professional role would change under conditions of uncertainty, resource constraint or increased demand and derive consequences for current practice, preparedness and prevention.

[6] *e.g. heatwave, supply chain failure or extreme weather event.*

3. CO-BENEFITS, HEALTH PROMOTION AND PREVENTION

LEARNERS WILL BE ABLE TO:

KNOWLEDGE

3.1.1. Explain the concept of health and environmental co-benefits and their impacts on population health outcomes (e.g. non-communicable diseases and disability-adjusted life years) and healthcare costs.

3.1.2. Recognise interventions with potential for health and environmental co-benefits and describe real-life successful examples, e.g. promoting plant-rich diets (e.g. Planetary Health Diet), active mobility and public transport, improving access to green spaces, fostering community engagement.

3.1.3. Describe the principle of 'Health for All Policies,' explaining how it integrates health considerations across sectors and provide examples of policies that generate co-benefits for human, animal and ecosystem health.

3.1.4. Evaluate behaviour change strategies[1], appraise their limitations and critically examine the adequacy of individual behaviour-change approaches relative to structural determinants of health when addressing Planetary Health challenges.

[1] *e.g. motivational interviewing or climate-sensitive communication.*

ATTITUDES

3.2.1. Situate opportunities for health and environmental co-benefits within their own professional context, articulate how they would actively leverage one and reflect on what structural constraints would need to change to make this possible.

3.2.2. Examine their own assumptions about sufficiency and community participation and articulate where these align or conflict with sustainable health policy principles.

3.2.3. Engage with a democratic or participatory process (real or simulated)[2] and reflect on what it reveals about power and inclusion in health decision-making.

[2] *e.g. citizens' assembly or youth council.*

3.2.4. Commit to promoting structural change beyond individual behaviour modification and articulate the reasoning behind this commitment.

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SKILLS

3.3.1. Critically integrate co-benefit considerations (e.g., diet, mobility, nature) into professional practice and patient/client counselling.

3.3.2. Develop a concrete advocacy message or policy brief applying a Health-for-All-Policies perspective to a Planetary Health-relevant issue at local or institutional level and justify the policy argument to a peer audience.

3.3.3. Engage in participatory processes and transdisciplinary collaboration to strengthen community-based and democratic healthcare models.

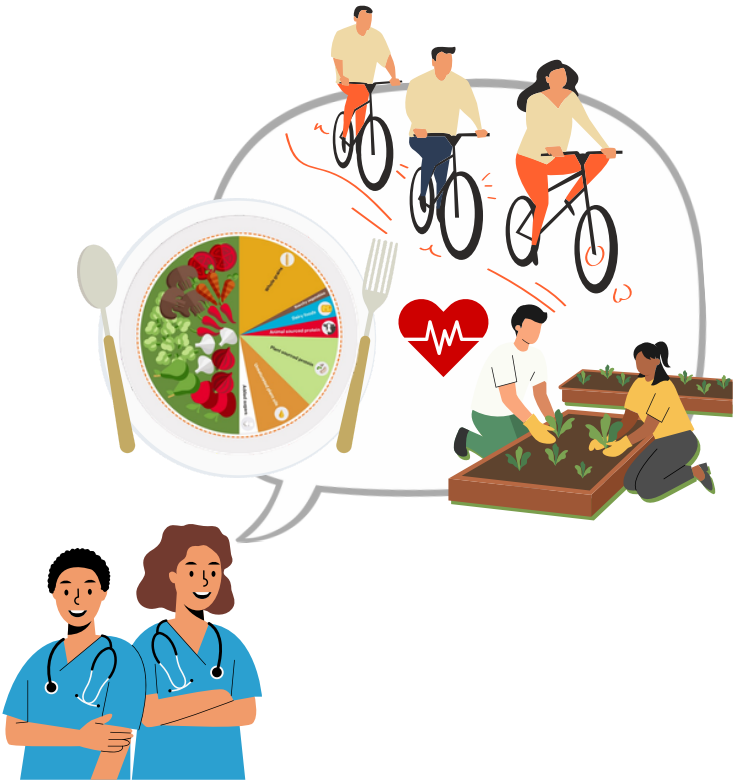
3.3.4. Apply principles of behaviour change strategies and patient-centred communication strategies that acknowledge emotions, values and concerns (e.g. fear, resistance, eco-anxiety) in their professional interactions.

ACTIONS

3.4.1. Identify co-benefit interventions relevant to their professional context, develop an advocacy strategy for it and take one initial concrete step towards executing it, reflecting on the barriers encountered.

3.4.2. Engage in a patient, client or community dialogue (real or simulated) on a co-benefit intervention, reflect on the emotional, cultural and ethical dimensions encountered and articulate how it enables or constrains individual actions and health outcomes.

3.4.3. Reflect on the limits of individual behaviour change approaches, examine their own assumptions about individual responsibility and agency and articulate a position on the role of health professionals in promoting systemic change.



4. PLANETARY HEALTH ADVOCACY AND ACTION

LEARNERS WILL BE ABLE TO:

KNOWLEDGE

4.1.1. Explain the concept of socio-ecological transformation and its relevance for Planetary Health.

4.1.2. Define and differentiate interspecies, reproductive, intra- and intergenerational justice and discuss their implications for health equity.

4.1.3. Describe alternative economic frameworks[1] and their implications for health systems and human, animal and ecosystem health.

[1] *e.g. Doughnut Economics, Wellbeing-Economy, Post-Growth, Circular Societies.*

4.1.4. Explain the concept of social tipping points and their potential for sustainable change.

4.1.5. Distinguish between ecological footprint and handprint and identify opportunities for health professionals to increase their handprint.

4.1.6. Explain the psychological dimensions of individual and collective reaction to ecological crises, including eco-anxiety, solastalgia and resilience-building[2] and critically examine their interpretation as context-appropriate or pathological.

[2] *e.g. mental health co-benefits of active engagement.*

4.1.7. Identify examples of transformative action and advocacy initiatives in Switzerland.

4.1.8. Discuss the role of health professionals as advocates in socio-ecological transformation.

ATTITUDES

4.2.1. Practise empathic engagement with the lived experience of those disproportionately affected by the planetary crises and articulate how this shifts their sense of professional obligation.

4.2.2. Process their own emotional response to the ecological crises in a structured collective setting, articulate how this shapes their capacity for sustained advocacy and navigate eco-anxiety and moral distress by drawing on reflective practice and peer support.

4.2.3. Engage with a transformative approach and reflect on what it offers and what tensions it creates for their professional identity.

SKILLS

4.3.1. Reflect on their ecological footprint, identify ways to enhance their handprint and examine the structural factors that constrain or enable individual change, articulating meso- or macro-level actions alongside individual actions.

4.3.2. Engage in individual and collective resilience-building practices.

4.3.3. Lead or organise a health-related advocacy initiative[3] for socio-ecological transformation, and reflect on the structural obstacles, power dynamics and assumptions about professional agency the experience revealed.

[3] *e.g. a campaign, a policy brief to a decision-maker, a public action or an institutional proposal.*

4.3.4. Communicate effectively and respectfully about socio-ecological transformation and social tipping points, applying evidence-informed, disinformation-aware and audience-specific communication strategies.

ACTIONS

4.4.1. After processing ecological grief or eco-anxiety in a structured collective setting, articulate concrete actions they are prepared to take as a health professional in response to what arose.[4]

[4] *completes the emotional arc opened in 4.2.2.*

4.4.2. Analyse a current Swiss health or environmental policy using lenses of socio-ecological justice, commercial determinants of health or intergenerational equity, identifying where health professionals have influenced or failed to influence its development.

4.4.3. Take and defend a position as a health professional within a contested Planetary Health policy debate[5], articulate the values and assumptions shaping their stance and identify where these may conflict with health equity commitments.

[5] *e.g. carbon taxation, meat subsidies, divestment of pension funds or health insurances, pharmaceutical lobbying, equitable access to reproductive healthcare or healthcare resource allocation.*

4.4.4. Design, organise and carry out a structural advocacy action on a Planetary Health issue, reflect on the power dynamics, resistance and assumptions about professional agency it revealed.

4.4.5. Sustain involvement in a collective resilience-building practice or community action over time, documenting how this shapes their long-term-capacity and motivation to contribute to the socio-ecological transformation.

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published in July 2026

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CITATION

Albermann, B., Otto, H. *Planetary Health Core Curriculum for Health Students in Switzerland. Summary*. PHUSE - Swiss Network for Planetary Health Education; 2026.

Full version:

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