Course syllabus

Healthy Urban Living in the Context of Changing Global Environmental Conditions Hälsofrämjande urbana livsmiljöer under globala miljöförändringar

TFRQ25, 7.0 credits, A (Second Cycle)

Valid for: 2026/27
Faculty: Faculty of Engineering LTH
Decided by: PLED A
Date of Decision: 2026-02-02
Effective: 2026-03-16

General Information

Depth of study relative to the degree requirements: Second cycle, has only first-cycle course/s as entry requirements
Language of instruction: The course will be given in English

Aim

The course aims to provide knowledge and understanding of how urban design can support physical activity, recreation and restoration as well as social activities for psychological well-being in times of climate change and biodiversity decline.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- Understand how multidisciplinary and interdisciplinary perspectives enhance the analyses of human-environment interaction.

- Demonstrate knowledge about theory and concepts connecting climate, biodiversity and urban design with health and psychological well-being.
- Gain an overview of different methodological approaches to study urban spaces regarding physical activity, psychological well-being and biodiversity.

Competences and skills
For a passing grade the student must

- Relate and apply theory and concepts in real world places.
- Be able to use existing methods and tools in the study of physical activity, psychological well-being and biodiversity in urban space.
- In writing and with reference to relevant course literature analyse urban space from the topic specific perspective.
- With reference to relevant course literature and analyses of urban space provide scientifically informed proposals for change from the topic specific perspective.

Judgement and approach
For a passing grade the student must

- Critically examine and discuss research in the field.
- Combine appropriate theories and methods for real world analyses.
- Critically discuss own and peers' environmental analyses and proposals in an inclusive and empathic way.

Contents

The course addresses human health and psychological well-being from the perspective of the individual. The course considers different user groups, and their relation to their neighbourhood environment including the buildings, streetscapes, green and blue spaces (vegetation and water). The course is structured as four integrated topics:

1. An interdisciplinary approach to healthy urban living

2. Health benefits of urban environments for physical activity and health

3. Urban environments, psychological well-being and health

4. Biodiversity and urban ecosystems in a changing world

Each topic includes lectures, seminars and an assignment to be conducted in the local environment. The local case will be investigated and analysed from different perspectives throughout the course and these investigations will serve as the basis for the final report – a policy information product.

Examination details

Grading scale: UG - (U, G) - (Fail, Pass)
Assessment:

Assessment is made based on the student's active participation in literature seminars, analysis, documentation and report of four

individual assignments and the final written report.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Modules
Code: 0126. **Name:** Healthy Urban Living in the Context of Changing Global Environmental Conditions.
Credits: 7.0. **Grading scale:** UG - (U, G).

Admission

Admission requirements:

- Basic education at least 180 ECTS in any of the following fields: Health Sciences, Sport and Fitness Sciences, Social Sciences, Psychology, Earth and Environmental Sciences, Biological Sciences, Ecology, Architecture, Landscape architecture or Urban planning. English 6/English level 2.

The number of participants is limited to: No

Reading list

- Bernard, P., et al: Climate Change, Physical Activity and Sport: A Systematic Review - Sports Med 51,1041–1059. 2021. https://doi.org/10.1007/s40279-021-01439-4
- Bratman, G., et al: Nature and mental health: An ecosystem service perspective - Science Advances, 5(7), eaax0903. 2019. https://doi.org/doi:10.1126/sciadv.aax0903
- Braubach, M., et al: Pathways linking biodiversity tohuman health: A conceptual framework - Environment International, 150. 2021. https://doi.org/doi:10.1016/j.envint.2021.106420
- Dahlgren, G., & Whitehead, M: The Dahlgren-Whitehead model of health determinants: 30 years on and still chasing rainbows - Public health, 199, 20–24. 2021. https://doi.org/10.1016/j.puhe.2021.08.009
- Felappi, J., et al: Green infrastructure through the lens of “One Health”: A systematic review and integrative framework uncovering synergies and trade-offs between mental health and wildlife support in cities - Science of The Total Environment, 748:141589. 2020. https://doi.org/10.1016/j.scitotenv.2020.141589
- Johansson, M., Pedersen,E., & Weisner, S: Assessing cultural ecosystemservices as individuals’ place-based appraisals - Urban Forestry & Urban Greening, 39, 79-88. 2019. https://doi.org/10.1016/j.ufug.2019.02.011
- Marselle, M., et al: The Functions of Biological Diversity in an Age of Extinction - Science, 336 (6087): 1401-1406. 2012. https://doi.org/doi:10.1126/science.1215855
- Pataki, D. E: Grand challenges in urban ecology - Frontiers in Ecology and Evolution, 3:57. 2015. http://www.frontiersin.org/articles/10.3389/fevo.2015.00057
- Pörtner H.-O., et al: Overcoming the coupled climate and biodiversity crises and their societal impacts - Science, 380(6642):eabl4881. 2023. https://www.science.org/doi/abs/10.1126/science.abl4881

- Rahm, J., Niska, A., & Johansson, M: The environmental experience during daylight and dark conditions: A conceptual model for pedestrians and cyclists - Psyecology, 15(1), 85-113. 2024. https://doi.org/10.1177/21711976241232869
- Sallis, J. F., et al: Physical activity in relation to urban environments in 14 cities worldwide: a cross-sectional study - Lancet, 387(10034),2207–2217. 2016. https://doi.org/10.1016/S0140-6736(15)01284-2
- Strain, T., et al: National, regional, and global trends in insufficient physical activity among adults from 2000 to 2022: a pooled analysis of 507 population-based surveys with 5·7 million participants - The Lancet Global Health, 2024. 12(8): p. e1232-e1243. 2024. https://doi.org/doi:10.1016/S2214-109X(24)00150-5
- Additional reference literature.

Contact

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Examinator: Maria Johansson, maria.johansson@abm.lth.se

Further information

This course is also given within EUGLOH

Eugloh - eugloh.eu