# **Concentration in Health and Wellbeing**

in the Master of Architecture program of the University of Illinois at Urbana-Champaign

# **Description**

The Health and Wellbeing Concentration in the Master of Architecture Program at the University of Illinois at Urbana Champaign provides students with the opportunity to develop an in depth understanding of the relationship between conditions in the built environment and individual performance and population health, well-being, and quality of life. A series of required and elective courses exposes students to a growing base of knowledge at the nexus of architecture, planning, medicine, public health, psychology, and numerous other fields. Concentration coursework enables students to develop expertise in research and strategies for environmental design, planning, and policy to improve human health and wellbeing outcomes through interventions in diverse environment types and contexts, at a range of scales. Responding to an unmet need in the profession, students completing the concentration will be prepared to work on interdisciplinary teams addressing complex societal problems involving the built environment's critical role in human health and wellbeing in the US and internationally.

The concentration reaches across disciplinary boundaries and requires coursework from at least one other discipline to complete the concentration. Graduate students who want to complete the concentration must formally declare their intention to do so by the end of the first semester of study by:

1. Meeting with the Health and Wellbeing Concentration Advisor who will act as their primary advisor for concentration coursework and mentor students in course selection;

2. Completing and submitting the attached Declaration of Intention to Pursue The Concentration in Health and Wellbeing

This concentration can be completed within the normal timeframe of the M.ARCH degree. Successful completion of the Concentration will be noted on the student's official transcript.

# **Concentration Coursework**

Students who declare the Concentration in Health and Wellbeing must complete a minimum of 22 hours of coursework with a focus on health and wellbeing. Specific course requirements are detailed below.

# ARCHITECTURE GRADUATE STUDIO (6 hours)

This studio also forms part of the standard M.ARCH Core curriculum.

- ARCH 572 Studio (6 hours)
  - To be taken from a faculty member whose primary program area affiliation is Health and Wellbeing or as jointly approved by the chair of the Health and Wellbeing Program Area and the Concentration Advisor. Studios with the ARCH 572/575 rubric may be used to fulfill this concentration requirement.

# ARCHITECTURE GRADUATE COURSES (16 hours)

(These courses also fulfill elective requirements for the M.ARCH degree.)

# **REQUIRED COURSEWORK** (8 hours)

- Either: (credit: 4 Hours)
  - ARCH 521: Advanced Applications in the Built Environment, Architecture and Global Health and Well-Being (4 Hours).

This course addresses topics at the intersection of environmental conditions and human health around the globe and engages students in reading, discussing, and applying the results of the latest research and translational studies linking environmental design to health in a range of diverse cultural contexts. Students consider the application of research to everyday practices and decision making, as well as to professional design, planning, and community health practices and engage in a secondary-source research project. Prerequisite: Restricted to graduate students.

...or

- ARCH 522 Advanced Research in Environment, Architecture and Global Health (4 Hours)

This course examines seminal and current research at the intersection of environmental conditions and human health around the globe. It introduces techniques for locating and interpreting research and synthesizing findings. Students explore a range of epistemologies and research ontologies, compare results and utility for health-focused architectural and environmental design and policy interventions. Students apply research to professional design, planning, and community healthfocused problems and decision making, and engage in a secondary-source research project. Prerequisite: ARCH 321 or ARCH 521, Restricted to graduate students.

• ARCH 563: Social and Behavioral Research in Designed Environments (4 Hours) Introduction to methods and techniques for systematically generating social and behavioral data relevant to programming, design, and evaluation of physical environments. Prerequisite: Graduate standing in architecture, landscape architecture, or urban and regional planning.

# ELECTIVE COURSEWORK (8 hours)

Students will take at least two additional elective courses, selected in consultation with the Health and Wellbeing Advisor.

- One elective Health and Wellbeing course. This course may be taken within the School of Architecture or from an outside unit. (credit: 3 - 6 Hours). To fulfill this requirement, students may take a second ARCH 572 studio or ARCH 522 (if they have taken 521 to meet the requirement above), or one of the following Health and Wellbeing courses offered by the school.
  - o ARCH 423 Soc/Beh Factors in Design credit: 3 Hours
  - o ARCH 424 Gender & Race in Contemp Arch credit: 3 Hours
  - o ARCH 596 Seminars (Special Problems in Health and Wellbeing)

In consultation with the Health and Wellbeing adviser, students may also select a course from a unit outside the School of Architecture, or an ARCH 571, 573, or 574 studio that addresses a health and wellbeing topic; or an ARCH 576 seminar; or other topical course.

• One or more courses from a unit outside the School of Architecture (credit: 2 - 5 Hours). Course(s), approved in advance by the Health and Wellbeing Advisor, must be focused on Health and Wellbeing and be taught in a unit outside of the School of Architecture.

# **Declaring the Concentration**

Students declaring the Health and Wellbeing Concentration are required to submit, at the end of their first semester of study and not later that the first day of classes of the second semester, a plan schedule that outlines their coursework for the next three semesters. This plan must be signed by the student and the Health and Wellbeing Advisor and submitted to the Chair of the Program Area and the Director of Graduate Programs and Studies not later than the second week of classes of the student's second semester of study (see attached form).

# Declaration of Intention to Pursue The Concentration in Health and Wellbeing

in the Master of Architecture program of the University of Illinois at Urbana-Champaign

Please fill out this form and indicate on subsequent pages your planned program of study.

*I intend to pursue the Concentration in Health and Wellbeing. I have spoken with the Health and Wellbeing Advisor listed below and they have reviewed my proposed program of study.* 

# Name of Student

(PRINT)

(SIGN)

(MM/DD/YY)

I have spoken with and advised the student named above. I agree to serve as their advisor for the Concentration in Health and Wellbeing. I have reviewed and approved their plan of study as shown on page two.

# Name of Health and Wellbeing Advisor

(PRINT)

(SIGN)

(MM/DD/YY)

Health and Wellbeing Program Area Chair

(PRINT)

(SIGN)

(MM/DD/YY)

Director of Graduate Studies

(PRINT)

(SIGN)

(MM/DD/YY)

Typical Plan of Study

If you are altering the semesters in which you are planning to take the required core courses please work with the Health and Wellbeing advisor to alter this plan as required.

First Semester ARCH 536: Planning and Design of Structural Systems	4 hours
ARCH 57X: Elective Design Studio (preference 572 if possible)	6 hours
ARCH 577: Theories of Architecture	4 hours
ARCH 521, ARCH 563 or HWB elective for HWB Concentration (circle one)	4 hours
TOTAL FIRST SEMESTER CREDIT	18 hours
Second Semester	
ARCH 517: Modern Architectural History 1850 - Present	3 hours
ARCH 57X: Elective Design Studio (preference 572 if possible)	6 hours
ARCH 537: Architectural Control Systems	4 hours
ARCH 522, HWB Elective, Architecture or outside (circle one)	4 hours
TOTAL SECOND SEMESTER CREDIT	17 hours
Third Semester	
ARCH 57X/575: Integrative Design Studio (if possible)	6 hours
ARCH 521, ARCH 563 or HWB elective for HWB Concentration (circle one)	4 hours
Other Elective	4 hours
TOTAL THIRD SEMESTER CREDIT	14 hours

# Fourth Semester

CORE CREDIT TOTAL 46 hours	
TOTAL THIRD SEMESTER CREDIT	14 hours
ARCH 538: Design and Construction Futures	4 hours
ARCH 501: Professional Practice	3 hours
ARCH 521, ARCH 563 or HWB elective for HWB Concentration (circle one)	4 hours
ARCH 57X/575: Integrative Design Studio (if needed)	6 hours

- + ELECTIVE CREDIT TOTAL 16 hours
- = DEGREE TOTAL: 62 hour minimum for M.ARCH + Concentration

# Examples of Possible Additional Elective Coursework:

#### School of Architecture

#### ARCH 423 Soc/Beh Factors for Design credit: 3 Hours.

Research-oriented introduction to existing social and behavioral knowledge, methods, and tools for relating man to his physical and social environment, with implications for theories and a philosophy of architectural design. 3 graduate hours. Prerequisite: Consent of instructor.

#### ARCH 424 Gender & Race in Contemp Arch credit: 3 Hours.

Analyzes how the built environment reflects social attitudes towards gender and race. Identifies the work of women and people of color in architecture and related disciplines as consumers, critics, and creators of the environment. Provides links with valuable professional networks in Chicago and elsewhere. 3 graduate hours. Prerequisite: Consent of instructor.

# ARCH 576 Architectural Design Seminar credit: 3 Hours. (with approval of HWB

**Advisor)** Presentations and discussions relative to various areas of architectural and environmental design concerns. Prerequisite: Consent of instructor.

#### ARCH 596 Special Problems in Health and Wellbeing credit 2 to 4

In-depth investigation of emerging issues and specific areas of research interest. Topics are those beyond what is covered in graduate courses regularly offered in the area of health and wellbeing, including theories and knowledge of specific buildings or projects in diverse global contexts; comparative studies; and theoretical, conceptual, and health-focused problems. 2 to 4 graduate hours. May be repeated in subsequent terms to a maximum of 12 hours.

#### Units outside School of Architecture

#### Community Health

#### CHLH 461 Environmental Toxicology & Health credit: 3 Hours

Explores toxicological, environmental, public health, occupational and ecological aspects of the use and release of toxic substances in the environment; features case histories of environmental contamination that illustrate ecological, health, and social aspects of pollution; emphasizes biochemical mechanisms and ecosystem consequences. 3 graduate hours. Prerequisite: A college chemistry course and a college biology course; or consent of instructor.

# CHLH 469 Environmental Health credit: 3 or 4 Hours.

Appreciation of the concepts and mechanisms used to prevent or control environmental conditions that may lead to infectious or other environmentally induced diseases. Presents topics from a public health perspective that include air pollution, water supply management, waste management, radiation protection, food hygiene, occupational health and disaster management. Same as ENVS 469. 3 or 4 graduate hours. Prerequisite: CHLH 274 or equivalent.

# CHLH 473 Immigration, Health & Society credit: 3 or 4 Hours.

This interdisciplinary seminar examines the social determinants of US racial and ethnic health inequalities through the lens of (im)migration. Topics to be addressed include: conceptualizations of race and ethnicity, immigrant-adaptation theories, discrimination, place,

and the intersections of race, ethnicity, poverty, immigration, gender and health. Same as SOC 473, and SOCW 473. 4 graduate hours.

#### CHLH 474 Principles of Epidemiology credit: 4 Hours.

Investigation of descriptive epidemiologic techniques (comparisons of disease rates in different populations) and analytic study designs (case-control and cohort studies and randomized trials). Applications to and examples from invectious and chronic diseases are presented. Group exercises involving the investigation of epidemiologic problems and application of analytic epidemiologic techniques are performed. Same as ENVS 474 and PATH 474. 4 undergraduate hours. 4 graduate hours. Prerequisite: One statistics course.

#### CHLH 575 Chronic Disease Prevention credit: 4 Hours.

Advanced course in population-based approaches to chronic disease prevention, with emphasis on policy and environmental strategies affecting lifestyle risk factors. Provides an understanding of common diseases, screen tests, community assessment, systematic evidence reviews, and evidencebased community interventions. Prerequisite: MPH students or consent of instructor.

#### Geography

#### GEOG 466 Environmental Policy credit: 3 or 4 Hours.

Examination of the geographical and political aspects of human-environmental relations; focusing on how environmental problems are defined, negotiated, and addressed through policy formulation. Specific approaches to environmental policy will be considered at different geographical scales. Same as ESE 466. 3 undergraduate hours. 4 graduate hours. Prerequisite: One course in Geography or Political Science or consent of instructor.

#### GEOG 484 Cities, Crime, and Space credit: 3 or 4 Hours.

Focusing on US cities, this theory-intensive course surveys traditional and critical perspectives on relations between crime, space, and place. We will explore this interplay within broader contexts of industrial and post-industrial urbanization, concentrating on dynamics including governances, economic processes, and social transformations. Emphasis will be placed on the extent to which these interwoven processes generate, classify, organize, and react to crime across cityscapes. 3 undergraduate hours. 4 graduate hours.

#### GEOG 496 Climate & Social Vulnerability credit: 4 Hours.

Existing climate variability and likely climate change call for policies to protect vulnerable people who make their livelihoods in a changing environment. Students will explore: 1) causes of climate related stress and disaster; 2) theories of vulnerability and adaptation; 3) practices and policies designed to reduce economic loss, hunger, famine and dislocation in the face of climate trends and events. Focus on multiple policy scales affecting poor and marginal populations, who are disproportionately vulnerable when facing climate stress, drawing on case examples primarily from the developing world. Same as ATMS 446 and SOC 451. 4 graduate hours. Prerequisite: GEOG 410, GEOG 466, GEOG 471, GEOG 520, or consent of instructor.

#### Human Development and Family Studies

#### HDFS 408 Hospitalized Children credit: 4 Hours.

Examines the developmental needs and stress reactions of children and families in a hospital/medical setting; examines responses of family and staff facing terminal illness and the death of a family member; familiarizes students with general hospital procedures, medical terms, and illnesses; introduces the role of Child Life programs and the Child Life Specialist. 4 graduate hours. Prerequisite: HDFS 105 or consent of instructor.

### HDFS 425 Family Stress and Change credit: 4 Hours.

Applies family theories (e.g. family systems, family stress, multigenerational developmental perspectives) to understand how families change and adapt to stress across time and diverse contexts. Attention is given to assessing intergenerational family dynamics and working with individuals and families to reduce negative patterns. 4 graduate hours. Prerequisite: HDFS 120 and HDFS 290.

#### HDFS 527 Family Resiliency credit: 4 Hours.

Examines complex factors, including culture, economy, and values conflicts, that challenge families and the range of adaptive strategies that families deploy amid various challenges and stressors. Activities include developing a research or action proposal related to developing family resiliency. Prerequisite: HDFS 521 or HDFS 525 or equivalent.

#### HDFS 534 Neighborhoods and Human Dev credit: 4 Hours.

Theories, methodological issues, and current empirical research on the impact of neighborhoods on human development and family welfare across the life course including how neighborhoods characteristics, e.g., poverty, racial and ethnic composition, and geographic space, influence child and adolescent development, health, and employment opportunities and success in adulthood. Key mechanisms include: family conditions, local environment, social networks, and spatial mismatch. 4 graduate hours.

#### Landscape Architecture

# LA/HORT 430 Children and Nature credit: 2 Hours

Study of research theory and evidence suggesting the importance of children's contact with natural environments including, designed urban greenspaces, managed sustainable landscapes, and wilderness, for healthy child development, ecological literacy, and proenvironmental behavior as adults. Discussion of research implications and applications for redesigning our communities' outdoor spaces, societal values, public policies and education systems to foster children's access to, and bonding with, nature. 2 graduate hours.

# LA 470 Social/Cultural Design Issues credit: 3 Hours.

Critical discussion of notions and theories pertaining to the reciprocal effects of landscape architectural design and human behavior. 3 graduate hours.

# LA 506 Landscape and Vision credit: 4 Hours.

A study of the major 20th-century texts on vision, perception, and perspective as applied to architecture and landscape. Prerequisite: Doctoral students only; master's level students must receive permission from instructor.

# LA 570 Landscapes and Human Health credit: 3 Hours.

We will explore the challenge of, and science behind, creating healthy, sustainable places. We will engage this topic by learning about four mechanisms through which places impact health. We will examine the empirical evidence in support of each of these mechanisms. Learning in this course grows from a series of readings, active participation in class discussion, and the development of a review paper or a research proposal. Same as CHLH 580 and GEOG 561. 3 graduate hours. No professional credit. Prerequisite: Graduate student standing.

# Urban Planning

# UP 405 Watershed Ecology and Planning credit: 4 Hours.

Uses the watershed as the basic organizing concept in environmental planning and management; methods for assessing watershed boundaries, soils, land use, and groundwater system processes and developing plans for watershed protection. Emphasizes ecological implications of patterns of land use on functional and qualitative aspects of watershed systems. All-day field trip required. 4 undergraduate hours. 4 graduate hours. Prerequisite: Should have a previous course in environmental science.

# UP 406 Urban Ecology credit: 4 Hours.

Examines cities as natural systems, combining ecological analyses with historical, anthropological, and sociological studies of urban nature. Addresses ecological sustainability, growth management, biodiversity, restoration, and environmental justice. Required field trip. 4 undergraduate hours. 4 graduate hours.

# UP 423 Community Development in the Global South credit: 4 Hours.

Introduces students to the main theoretical frameworks and conceptual building blocks of urban and community development in the Global South. It helps students to develop critical grassroots focused understanding of the approaches to development planning, the notion of community participation and empowerment, and the role of various actors including the non-government organizations and the community-based groups. 4 undergraduate hours. 4 graduate hours.

# UP 432 Transportation Equity credit: 3 Hours.

This course explores principles of justice and equity in transportation policy and planning. Students will learn about foundations of equity, laws and policies governing equity and environmental justice, assessment metrics, and the role of public planners and advocates in creating equitable transportation systems. Emphasis is on the United States experience, but will include some international content. Course activities include discussion and a practicum component. Students taking the course for graduate credit will lead additional discussions and a longer final paper. 3 graduate hours.