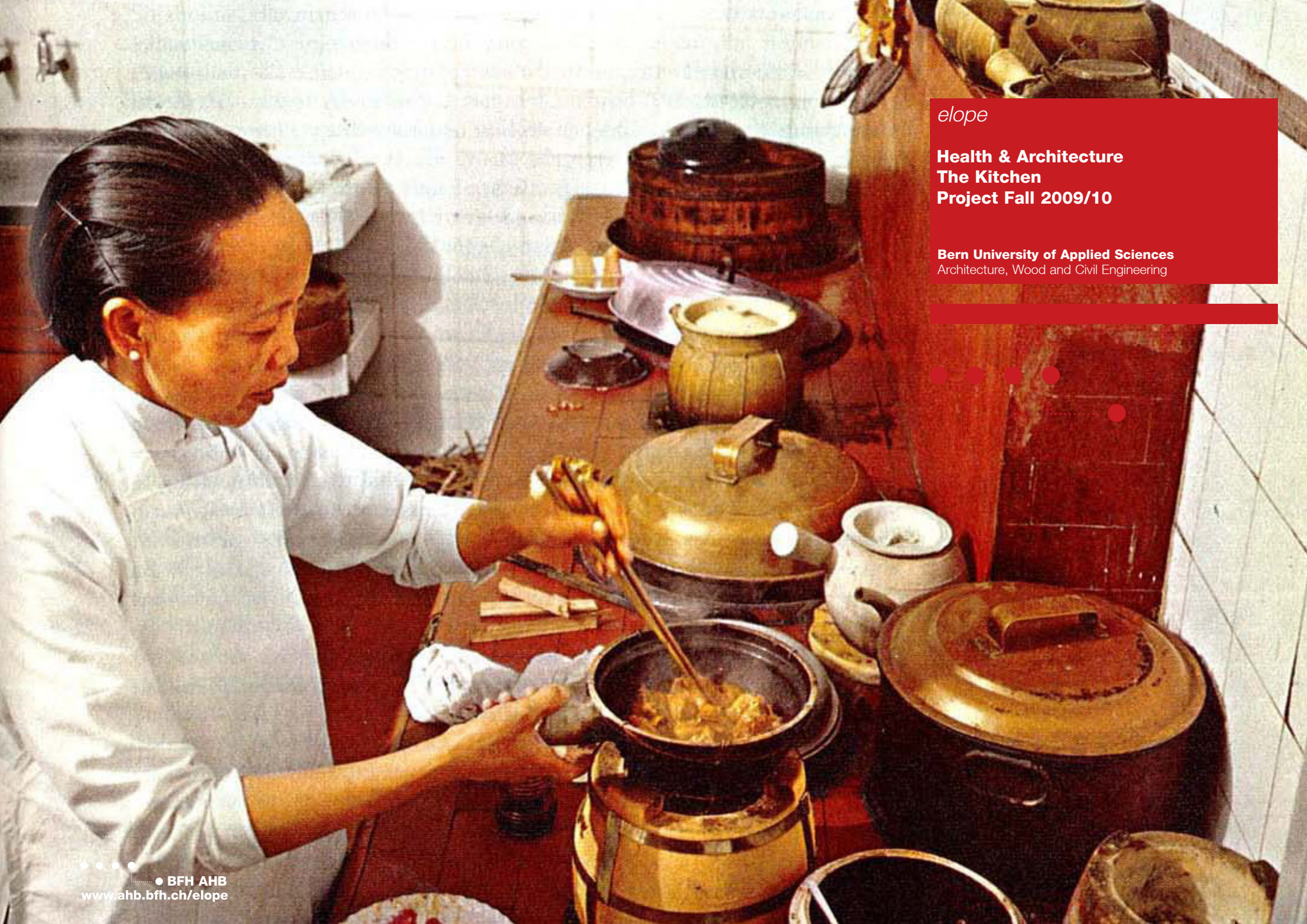


elope

Health & Architecture
The Kitchen
Project Fall 2009/10

Bern University of Applied Sciences
Architecture, Wood and Civil Engineering

elope
embedded learning-oriented project environment
The Kitchen | Project Fall 2009/10

Research Field - Health and Architecture

In our continuously growing urban society the health of human beings is increasingly influenced by the built environment. Therefore, the dependence of health and architecture shall be investigated: Health-related and design-relevant indicators will be described and made available for the architectural design process.

Strategies of change are sought which enable a (re-)design of the built environment in such a way that negative influences can be reduced or avoided and positive elements are fostered and strengthened. A continuously growing kit of architectural elements, sociocultural measures, and trans-disciplinary methodologies shall support and allow for an adequate development of design processes which have the „healing and healthy environment“ as their objective.

An existing framework in today's context shall form the focus of our investigation with the aim of identifying potentials for change and to develop effective strategies towards a sustainable, health-driven design for the built environment.

«Life can only be understood backwards;
but it must be lived forwards.»
Søren Kierkegaard

Title page: Ed.: TIME-LIFE International, Die chinesische Küche, 1970 (p.30)

elope - A Plaftform for Learning and Teaching

Context

Nowadays, students are increasingly challenged within their specific core disciplines; in addition however, they are also supposed to develop skills in order to apply this particular knowledge in practice. This ideally goes hand in hand with a sense of maturity of the individuals' characters vis-à-vis the social, cultural, and economical environment. The practical application of theoretical knowledge can thus only be implemented successfully, if these three basic elements are taken into account. The curricula for studies in Architecture and Architectural Process Management at the Bern University of Applied Sciences are fundamentally based on this comprehension and form the academic backbone of all *elope* projects.

In addition to students' disciplinary knowledge, the ability to work efficiently within multicultural environments has become increasingly important. This cognition has led to universities becoming more proactive with regard to networking and offering joint courses, which is where *elope* is actively involved in.

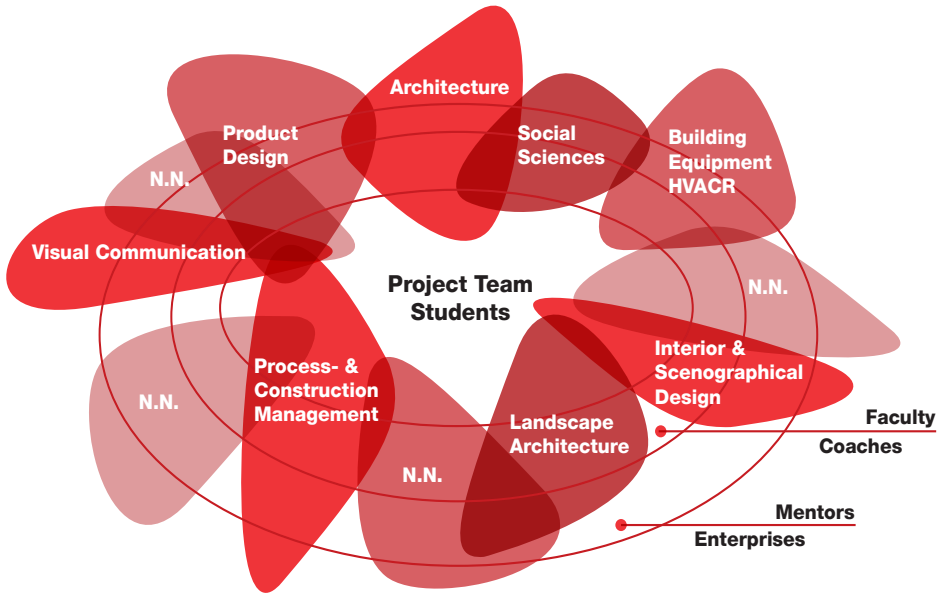
elope sees itself as a learning system cooperating in a network of international universities and industry partners. It does so within a reflexive context, taking into account the various cultures involved in order to create new methods of resolution regarding teaching and learning. Students of the Master level are at the core of this concept and are given the opportunity to develop process-oriented expert knowledge through interdisciplinary, transcultural teamwork as well as the use of information and communication tools. Furthermore, *elope* respects the paradigm shift from supply-pushed to demand-pulled learning, i.e. to replace the swatting of facts by process knowledge.

A further characteristic of today's challenges is an increasing tendency for the overlapping, or even amalgamation, of various lines of work in order to give way to new, holistic, and transdisciplinary perspectives.

elope is a comprehensive platform which offers students the chance to contribute their full potential. Each individual's attitudes, characteristics, and abilities are taken into account in order to allow as much space as possible for independent development of students' responsibilities and skills. A contribution to the concept of „campus in mind" is made by *elope* in providing the multidisciplinary teams with learning facilities that are based on experimental and interactive technologies.

elope is not only about to significantly remould the landscape of teaching and learning at universities, it also intends to yield substantial influence concerning decision-making and the creation of practical work processes. In association with university teaching staff, the mentors are instrumental in contributing expert knowledge and regular feedbacks to the teams, and at the same time they are also actively involved in the evaluation of processes and related products. The latter will be of increasing importance in the future, as scientific research has been initiated in connection with reflections of certain PBL (Process-Based Learning) methods. It is the intention of this kind of research to support students with regard to the awareness of their personal learning styles. The findings are then made accessible for future work in a broader context.

Design innovation, which essentially means the definition, development, and creation of new concepts and their successful launch, is the driving factor for a powerful, competitive economy and the prosperity of society. Therefore, the education of professionals at universities and the continuous development of architects, engineers, urban designers, sociologists, etc. in the wide field of design innovation are of central importance in particular when we are trying to cope with the global challenges to jointly develop and implement sustainable processes. These processes have to respect efficiency (in the use of limited resources), sufficiency (by reducing the wishes to the necessary), and congruence (by fostering and reinforcing recyclable products).



Pedagogic Model

The students are at the centre of *elope*'s working model. They build multidisciplinary teams with one (or two) student(s) coming from each profession. Since they originate from different universities around the world, they bring together different methodologies to tackle a task and have access to an attractive set of faculty coaches. After the kick-off weeks, the students work in non-collocated, distributed, interdisciplinary teams - as they would do in practice, each administering his/her disciplinary contribution but also assuming responsibilities for the entire process and product as a team member. The faculty members of the partner universities and the mentors from the industry/ client act as consultants and coaches on call of the teams.

Experts and mentors from the building and construction industry who are not part of the university are an additional and essential part of *elope* courses. Their participation contributes a high degree of practical knowledge to the projects, pointing out the actual „state of the art". In this manner, *elope* manages to link academic education and professional practice. The intensive interaction between these two elements guarantees a rapid transfer of technology, while at the same time ensuring that the students involved are highly motivated.

The evaluation of the project results are in the duty of an international jury, which consists of at least one member of each discipline. Each team receives a jury report with an acknowledgement of the contributions according to initially specified criteria. *elope* puts a strong emphasis on the assessment and self-assessment of the processes by systematically requesting the students to reflect on the lessons learnt keeping Søren Kierkegaard's statement in mind that „life is lived forwards, but only understood backwards".

Responsibilities of elope and its Partner Universities

elope is a learning platform which enables and facilitates interdisciplinary processes. It has proven to offer an excellent test bed for research in the field of modern teaching and learning as well as in the area of evaluation of novel learning spaces.

The Bern University of Applied Sciences, School of Architecture, Wood and Civil Engineering (AWC/BUAS) assumes the responsibility of organizing the course (kick-off weeks, review meetings, coaching sessions, debriefing, etc.), of defining the task together with the partner universities and of co-ordinating the partnership with the client. The *elope* team provides the necessary documentation for the course and offers an introduction to information and collaboration technologies.

At the same time, it is important to put on record that the responsibility for the disciplinary supervision of the students remains with the sending home universities. A close coaching accompaniment and monitoring of the project by the faculty of the partner universities is essential and requested by *elope*. The participation of the responsible coaches during the kick-off events, the coaching sessions, the reviews, and the final presentations will add to the interdisciplinary depth and thus to the quality of the projects. This responsibility also relates to the grading of the students' contribution. The *elope* jury will provide a qualification on the team processes and on the entire teams' interaction patterns. Finally, it is suggested that students who successfully participate in *elope* projects receive academic credits (e.g. based on the ECTS). The workload is estimated to range between 30% - 40% on average during the entire semester.

The experience during the previous *elope* courses has revealed that this double responsibility of the student towards his/her *elope* team and towards the home university and professors, respectively, may also bear conflicts. *elope* demands that team decisions be respected concerning the approach and the agreed objectives; *elope* leaders are convinced that within this framework there is still ample tether to adhere to high academic standards in the disciplinary work.

The involved faculty members will be invited to contribute their views in the definition of the task. They will receive full access to all documents of the *elope* project as well as to the communication software used in the project.

Guaranteed access to a video conferencing system (e.g. Polycom, Tandberg, etc.) for participating students remains in the responsibility of each partner university and is essential for a successful collaboration process.

Shanghai | Chongming Island

The Kitchen - Project Topic

Concepts for a sustainable lifestyle on Chongming Island.

Creating a sustainable solution for the transition of rural and urban communities. This can be achieved by the design of systems that balance technology, activities, and services that enrich the users' lives.[1]

Rural – Urban Migration

In the past decades, the living conditions for the rural population in China have changed dramatically. "The shrinking of the rural population from 74% of 1.3 billion inhabitants in the 90ies to 56% at the end of 2006 is triggered/produced by a rapid urbanization process and is still continuing."[2] One of the consequences is that nowadays the living conditions are no longer fitting the space and behavioral concept of the rural population.

Changing Social Structure

From big families to single-person households: the requirements of both the rural and the urban population are changing. For example, one drastic influence on the rural population is the obsolescence of society. Younger generations are moving to the metropolises and the whole traditional family structure is falling apart. What does that mean for the built environment?

Chongming Island

"Chongming Island is designated by the Chinese government to be a model for sustainable development in China. It is a testing ground for prototypes promoting ecological and socioeconomic sustainability with the collaboration of international and local partners."[3] The Kitchen project is a selected part of such prototyping; it will be a challenge to reflect and act on intellectual and pragmatic levels with a multidisciplinary approach.

Cooking

In the Chinese culture, eating and cooking has an outstanding position among many other cultural techniques. Health and balance, prosperity and happiness are directly linked with the dishes that are prepared and eaten. However, also the traditional preparing and consuming/eating of food are in a status of alteration.

Cooperation

The project is taking place in cooperation with TEKTAO Urban Design Consulting Co.,Ltd[4] in Shanghai. TEKTAO will organize all the needed contacts with the local community, the families, village leaders, and local government.

1,3 Lù Cun: XianQiao Sustainble Community
2 news.xinhuanet.com
4 www.tektao.com.cn

Focus

The *elope* project The Kitchen will be a laboratory for new ideas and a platform for developing adjusted solutions for a sustainable contemporary and future living in a village of Chongming Island. Together with the client and the villagers of Chongming Island, new perspectives and a field of interventions have to be defined. Within the task, the kitchen plays a key role, standing in the line of a very long established culture. Nowadays, the kitchen tends to be the unhealthiest room in the house. The open fire of the cooking stove, fumes, no heating system in cold winter days, and hot climate in the summer are conditions no longer compatible with a healthy way of living for the habitants. The kitchen as one of the most important rooms should become the symbol of enjoyment, life, health, happiness, and prosperity.

Purpose

The aim of the *elope* project is to identify and develop new perspectives for Chongming Housing by focusing on one family and their housing unit and to initiate a change process together with the villagers. The functionality of the kitchen and its infrastructure have to be considered as well as the contemporary living habits of changing household structures and the ingredients from the corresponding agricultural lot. How can the living conditions be improved while respecting traditional habits and by taking into consideration the development of the way people will live, cook, and celebrate in the future? The task is to rethink the kitchen as the core of the future living for the rural population of China as well as to design social, ecological, economical, technical, and functional innovation – translated into space.

Chongming Island | May 2009

Structure of the Course

Within their teams, the students are expected to work out their own solutions for resolving a complex multidisciplinary and transcultural task. During the course, professional, methodological, social, self- and team-related competencies are enhanced. The project is segmented in three phases and starts with a ten days kick-off event with physical presence on Chongming Island in China, where all students and faculty members come together mainly for the following purposes:

Phase 1 | Preparing for *elope*: interdisciplinary & international collaboration in China

Team Formation

It proved extremely important to build a profound social link among the students as the basis for a solid collaboration during the course of the project.

Lectures on Specific Topics

Several lectures are given to facilitate the start-up for the project with respect to a common nomenclature. Critical aspects of the project are addressed by the lectures, given by faculty and also experts from the construction industry.

Project Planning

Definition of the project's process outline/plan: At the end of the kick-off week, the teams are to present a project plan including work packages, time line, definition of milestones, resource planning, schedule of further activities, etc. The presentation of the project plan to faculty, mentors, and experts from industry concludes the kick-off week, dismissing the students to their home universities with comments and recommendations for the further course of the project.

Infrastructure

Instructions on ICT: The teams will communicate through ICT during the whole development process after the kick-off week. Therefore, all students attend a workshop on using the communication tools (video conferencing for review meetings, exchange of documents, and design process management).

Collecting and Recording

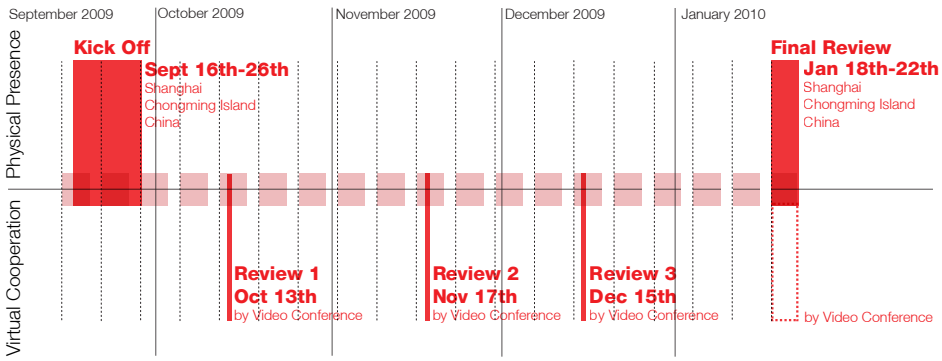
To acquire a deeper impression/understanding of the area and the site of intervention as well as to do research, to collect basic material and images, organized visits will be held on Chongming Island during the ten days in China. There will be a unique opportunity to meet with the residents and to collect information offered by the government and the academic team. This important background will allow for a well-founded start into the project and to elaborate meaningful solutions.

Phase 2 | Back at the Home University

The goal of the second phase is to develop the design, to formulate expertises and to create solutions. After the introductory days, the students return to their home universities. At the same time, they form local teams at the different locations to exchange basic information useful for all project teams. The planning as well as the manufacturing of models or project documentations are managed over *elope's* information platform (*elope* server). The teams will present the stage of their work on two intermediate reviews by using videoconferencing systems. Between the reviews, the teams organize at least three coaching sessions together with their local team coaches.

Phase 3 | Exhibition and Final Presentation of the Project

The final presentation has the goal to show the project's results to the client and to the local population and to offer possibilities for a discourse with potential Chinese users.



Chongming Island | May 2009

Application & Contact

Participating Disciplines
Students in the master's program of the following disciplines are welcome to apply:

- Architecture
- Product Design/Interior Design
- Landscape Architecture
- Process and Construction Management
- Building Technologies HVACR (heating, ventilation, air conditioning, refrigeration)
- Social Sciences

Application Documents
Students interested in participation submit:
- Curriculum Vitae
- Letter of Motivation

Deadline: July 31, 2009 to: elope.ahb@bfh.ch
Confirmation of participation from the *elope* team until mid August 2009.

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