

Report on the Engagement and Interactions of the Architecture/Urbanism Programme at Brandenburg University of Technology BTU with the OIKODOMOS Virtual Campus during Summer Semester 2011 and Winter Semester 2011/12.

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This Report is based on the presentation „Getting Started. Issues Relating to the Introduction of the OIKODOMOS Virtual Campus to Existing Modular Course Programmes”, held at the OIKODOMOS International Conference in Brussels, 27-28 October 2011 at W&K Sint-Lucas School of Architecture. We have added further information covering our current activities within the Virtual Campus environment. Images and diagrams are extracts of the conference presentation.

Abstract of the Conference Presentation

Presentation Title:

Getting Started. Issues Relating to the Introduction of the OIKODOMOS Virtual Campus to Existing Modular Course Programmes.

This conference presentation aims to discuss options of how to incorporate the virtual campus into existing course structures. Coursework carried out with students at Brandenburg University of Technology during summer semester 2011 will serve as the base for this discussion.

Brandenburg University of Technology, BTU, obtained associate status in 2011. Introduced to the learning platform by means of online information as well as conversations with the authors of the platform, the process required both, teaching staff as well as students to become familiarised with the concepts and features of the platform. At the outset, the following questions had to be clarified: At which level to engage with the virtual campus? Which options for the adoption of new learning activities/tasks are set out in existing module descriptions? (This applies to both, structure of the module as well as its content). Which common goals respective learning outcomes can be identified? How to incorporate the learning platform into existing (and tested) modes of joint teaching? How to make effective use of the different learning features and research modes? How to visualise online data in an analog format for studio discussions and presentations? How to engage students in critical discourse using the platform? How to obtain feed-back from both, students as well as authors /experts of the system and how to evaluate the outcomes?

Addressing the above questions, the presentation will conclude with an appraisal of the process and a series of propositions and further observations.

BTU course and teaching requirements:

This report aims at discussing our approach of how to engage with the OIKODOMOS Virtual Campus within the existing system of modularised courses at BTU. Coursework carried out with students at BTU during summer semester 2011 serves as the base for this report.

At BTU the requirements for each module are layed out in the „Course Regulations“ (Prüfungsordnung). While the existance of modules as such cannot be changed without changing the Course Regulations, the content description of each Module can be modified by the Module administrator. Learning Activities, Seminars, Lectures and Design Projects are assigned to the respective module for the length of a semester. Modularisation has produced a series of „combined“ Modules at BTU. In these modules teaching activities involve the input of more than one chair. This has opened up new possibilities, but at the same time administration requirements of the activities have increased and the options to adapt to new situations, such as the integration of OIKODOMOS Virtual Campus, are limited. The BA1 module, which we have chosen for our OIKODOMOS collaboration, is such a combined module.

The Chair of Design and Building Science has a strong interest in didactics of teaching architectural design and in learning methods. The teaching staff at the chair as published „Teaching Design in Bachelor Architecture Courses. The Cottbus Experiment“¹ in spring 2011. This publication is a response to the changes the Bologna Reform has brought to the architecture programmes at BTU and in Germany.

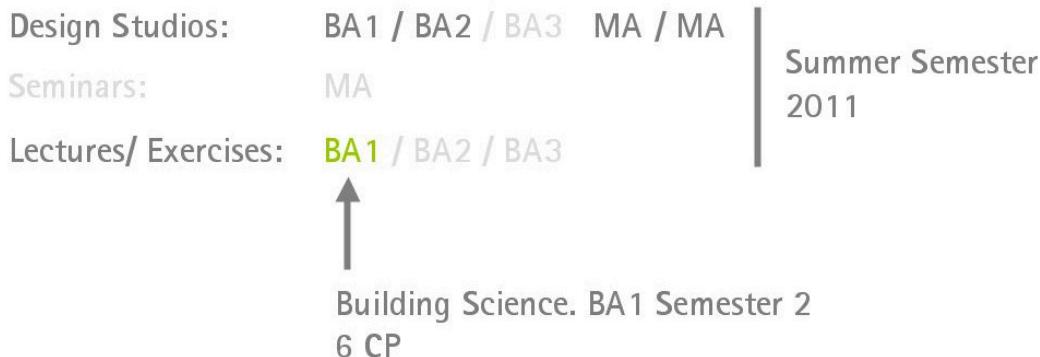
Identification of a suitable module for interaction:

During the course of one academic year the Chair for Design and Building Science is teaching architecture and urban planning students, on Bachelor as well as on Master levels. The chair is running Studios on BA1, BA2 and BA3 levels, and a Design Studio on Master level. The Chair is lecturing architecture students in Building Science on BA2 and BA3 levels, and urbanism students on BA2 level. In addition, there is a theory based seminar on Master level, and, until recently, a seminar for World Heritage Studies. The Chair comprises of four full-time teaching staff, including the Head of Chair, Prof. J. Kühn. The teaching programme of the chair varies considerably between summer and winter semesters.

During summer semester 2011 the chair had four architectural design modules as part of the regular teaching programme, and a module which combines a lecture format with group excercises resulting in a series of case studies. At this stage we identified the following questions:

- On which level to engage with the OIKODOMOS Virtual Campus (BA or MA) and as part of which module?
- How to assess the suitability of existing modules to blend into the Virtual Campus? (Design Studio, Seminar, Lecture/Exercise?)
- How to become familiar with the learning platform?
- Shall we Integrate or replace existing learning activities? To which extent do we have to re-define learning outcomes?
- How to administer the process?

¹ Knoll, Praeger, Zillich, Kling Tümmers, Entwurflehre im Bachelor Architektur. Das Kottbus Experiment, Berlin 2011



BTU Chair of Design and Building Science. Norbert Kling Oikodomos Conference Brussels 27./28.10.2011



Following a consultation period with Dr Leandro Madrazo the choice for our initial interaction with the Virtual Campus fell on the module which combines a lecture format with group excercises. The outcome would be case studies delivered to the OIKODOMOS Case Repository.

Module characteristics:

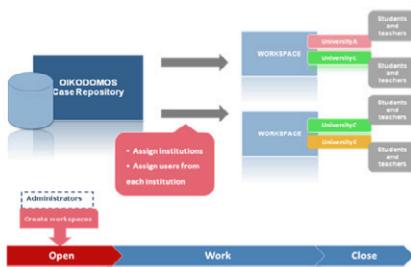
- Name of Module: Building Science 1 / Building Ordinance / Building Economics (>combined module, joint teaching)
- Combined Teaching: Input Chair A / B / C
- ECTS: 1+3 / 1 / 1
- Teaching Method: Lectures and Group Exercises
- Number of Students: 110
- Number of staff available for Building Science component (1+3 ects): 1.5
- Learning Outcome: Basic knowledge of building typologies, building components, circulation systems etc. for students of urbanism programme
- Deliverables: Case Study to Chair's Compendium of Urban Dwellings/ Mixed-Use Schemes

Module modifications to accommodate interactions:

- Oikodomos Activities were to be limited to our chair's module component. Chairs B and C were not involved.
- Existing teaching concepts and learning activities were amended and extended rather than replaced: Upload to Case Repository as additional Deliverable.
- Adjustment of workload to conform to ECTS requirements.
- A „learning-by-doing“ approach was to be assisted by feed-backs from the system administrators and the online tutorials.

Introduction to OIKODOMOS: Staff and students

In order to be familiarised with the different aspects of the platform we made use of the available online tutorials and instructions. This initial information proved to be very helpful when pointing to more specific issues while in direct contact with the platform administrators. The tutorials were also made available to the students.



C.Overviewing the Case Repository

We are going to browse the Case Repository taking a look to the information gathered by the students in the last years. First of all we are going to sign in the Case Repository and then we are going to view the different views that the case repository incorporates.

XVI. Sign into case repository

1. Go to URL: <http://www.oikodomos.org/caserepository>
2. At top right, fill in the form with the following values and click Login button.
 - a. Username: guest
 - b. Password: guest

XVII.Home page: Bulletin board and Activity

1. In Home page, we can see the Bulletin board handled by teachers and the Activity that shows the on-going activity of students and teachers. The activity log is divided in four sections: case studies, collections, bibliographies and summary pages.

XVIII.Case studies

1. Click Case Studies menu option. We can see the list of the case studies and order them by title, user who has created it, architect, year of construction, and date of creation. Also, we can search using words in the text box and clicking search button.

Extract of tutorial document downloaded from the OIKODOMOS website during the preparations of the teaching activity.

In addition we introduced the students to the platform by means of an additional element in our introduction lecture. This included image stills of the key components of the Case Repository.

Modification of Exercise Outline and Course Administration

The next step required the modification of the exercise outline (description of learning activity) to accommodate the OIKODOMOS components.



Modifications to Exercise Outline:

OIKODOMOS tasks added to Exercise description.

The exercise outline with new elements relating to the OIKODOMOS platform highlighted. There are three additional pages covering the tasks provided by Chairs B and C (not shown).

Task 1 of the exercise encouraged students to get engaged with the platform and its features: "This task will provide you with the opportunity to become familiar with the interface of the „OIKODOMOS case-repository“ and the way it operates. There are many features available, and you are encouraged to test some or all of them."

Other students have already uploaded more than 300 case studies to the repository. The repository is conceived as active working environment and learning zone, not just as database. You can engage with the content or you can engage into a dialogue with the authors of the case studies and provide them with "peer-to-peer" feedback. The authors of the case studies will then have the opportunity to respond to your comments and critiques, and develop their case study further... your own case study will be evaluated by other participating students in the same way later on, so that you can, in return, build upon external feedback as well. This "ping-pong" process is called "cross-crit" which will help you to reflect more critically upon your own work.²

This first task reflects to a certain extent our own expectations, in particular in terms of the learning process.

The exercise outline included the schedule for the course, providing dates for consultations, presentations and dates for preliminary and final uploads to the BTU eLearning/eAdmin platform myBTU and the OIKODOMOS Case Repository. In addition to the course management and communication features provided by myBTU the course was administered using semester schedules and consultation lists.

The screenshot shows the myBTU Lernportal interface. On the left, there's a sidebar with links like 'My Home', 'Service Center', 'Content Management', 'Analyses and Reports', 'Tutor Center', 'Courses', 'myBTU-Support', 'Privacy Policy', 'Terms of use', and 'Library Information'. The main area has tabs for 'Home', 'Participants', 'Syllabus', 'Communication', 'Library', 'Description', 'What's new?', 'Preview', and 'Close'. Below these tabs is a 'Communication tools for this course' section. Under 'Communication tools', there's a 'Document archive' section titled 'freies Dokumentenarchiv' with a search bar and buttons for 'Download all files', 'New document', 'New category', 'Edit', 'Delete', 'Cut', 'Paste', and 'Show versions'. To the right of this is a 'Konsultationsliste' (Consultation List) table. The table has columns for 'Name', 'Gruppe A (inventarisiert)', and 'Gruppe B (inventarisiert)'. It lists various names and groups, with some rows highlighted in yellow and red.

The e-Learning platform myBTU used to support the learning activities of the module and a list used to organise consultations.

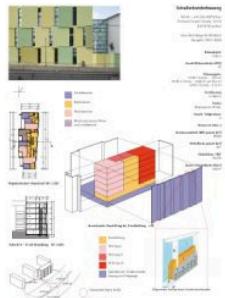
Exemplary Student Projects (Compendium Submission and Case Study for Repository)

The final submission consisted of six A3 size pages, of which three related to the tasks defined by Chairs B and C. The A3 prints included screen shots of the project „Card“ (a feature of the Repository), the research bibliography, the defined keywords and tags, the description of levels and dimensions as entered on the OIKODOMOS Case Repository. Hence the online information was available on the print-outs during the presentations in the studio.

² Extracted from the exercise outline, issued at the beginning of the course in april 2011

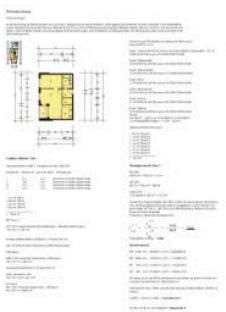
Student Case Studies. BA 1.

Compendium Submission (Print on A3. Deliverables Chair A/B/C)



Deliverables Chair A
 (Building Science)

Documentation,
 Summary and
 Bibliography of
 Entry to OIKODOMOS
 Repository



Deliverables Chair B/C
 (Building Ordinance,
 Economics)

Paul Dämpfert, Christoph Enger, Tim Kettler, Marian Knop, Munich, Leon Wohlhage Wernik, 2009



BTU Chair of Design and Building Science. Norbert Kling Oikodomos Conference Brussels 27/28.10.2011

Exemplary Student Project (Full Compendium Submission) comprising of six A3 pages for documentation, analysis and interpretation.

"Wohnen am Mittleren Ring"

Architects: Léon Wohlhage Wernik
 Architekten
 Offices: Léon Wohlhage Wernik Architekten
 Country: Deutschland
 City: Munich
 Address: Richard-Strauss-Strasse 60
 Dwellings: 50
 Completion year: 2009

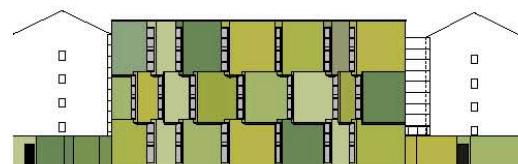
Creator: Marian Knop
 Date creation: 2011-06-18
 Case added in Workspace:
 OIKODOMOS_11

HOME USERS CASE STUDIES KEYWORDS TAGS COLLECT

OIKODOMOS_11 / Case Studies / "Wohnen am Mittleren Ring"

Floor-plans (4) Sections (2) Elevations (2) Renders/Perspectives (2) Details (2)

Marian Knop on 2011-07-11 Marian Knop on 2011-07-11 Marian Knop on 2011-07-11 Marian Knop on 2011-07-11



Facade design. View from the street without a Scale

The prestigious architect's office Leon Wohlhage Wernik Architects won the contest in 2004. They did the main tasks quit good - the task to design a building which complies with soundproofing terms of munich and which includes esthetic ambitious architecture.

CARD DESCRIPTIONS BIBLIOGRAPHY WWW RELATED CASES

Levels - Social □
 * Marian Knop wrote on 2011-07-11
 The project "Wohnen am Mittleren Ring" is located near the center of Munich. It consists of 50 apartments on five full basements.
 Levels - Economical □
 Levels - Technological □
 * Marian Knop wrote on 2011-07-11
 The project has a special location. It stands near a big main street of Munich. So the Architects build a modern sound protection wall. The

Link to our case study: <http://archiv.haus-salle.url.edu/oikodomos/caserespository/index.php/casesStudies/view/428>

Bibliography: Press clippings of the Architectures Office „Léon Wohlhage Wernik Architekten“, Documents from the Munich Building Department of Urban Design and Building Code

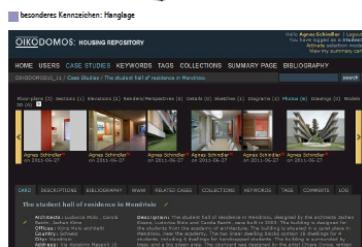
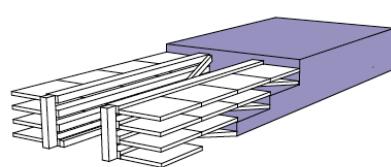
List of Related Cases: No case founded

List of Keywords: Theoretical Concepts - Design for all / Life long living; Social and Economical factors - Private developments, medium-cost housing, free market housing, High standing housing or custom - made housing (private clients);

Classification depending on users - Multi-generational housing / Age mix, Concepts related with Use / Function - Life-long living housing; Perception (of the building or dwelling) / Appearance - Texture, Colour; Spatial Organization - Building organizations related to access to dwellings - Gallery access / Single - load-bearing gallery - gallery access every floor, Point access / Multiple Vertical access; Morphology / Form - Band structure; Material / Materiality - Concrete, Glass, Metal; Technology - Construction Technology and Design Systems - Traditional building technique / Self-construction; Typologie - Building Typology - perimeter block / party-wall housing / infill block

List of Tags: Munich - Wohnen am Mittleren Ring - Sound insulation construction - Mittlerer Ring - Léon Wohlhage Wernik Architekten - special facade

Detail of page 3 of this case study, showing the integration of the OIKODOMOS case repository uploads to the layout.



Keywords:
Theoretical Concepts: Communal living / Forging a community
Social and economic factors: Communal residential buildings
Technological: Natural ventilation systems-areas, courtyard
Spatial Organization: Building organizations related to dwelling situations-Centralized
Building Typology: slab / detached block
Site Context: Landscape Integrated
Use of Space: Classification depending on users-Housing for young people

tags:
Development: loggia, arada
communal room: room for bicycles, room for parties
centralized/enclosed block
hillside situation

L. Kasper, F. Golla, F. Wiegandt, A. Schindler ss11

Project Description

The student hall of residence in Mendrisio, designed by the architects Jeniffer Künz, Ludovic Mala and Carole Bachti, were built in 2003.

Social/Communal
A single dwelling module has a 92.11 square meters, a common lounge, a small kitchen, a bathroom and two bedrooms. Besides, there is a room for bicycles, a room suitable for parties and a big parking lot next to the student hall. The interior of the dwelling does not provide any problems because of the exterior private rooms.

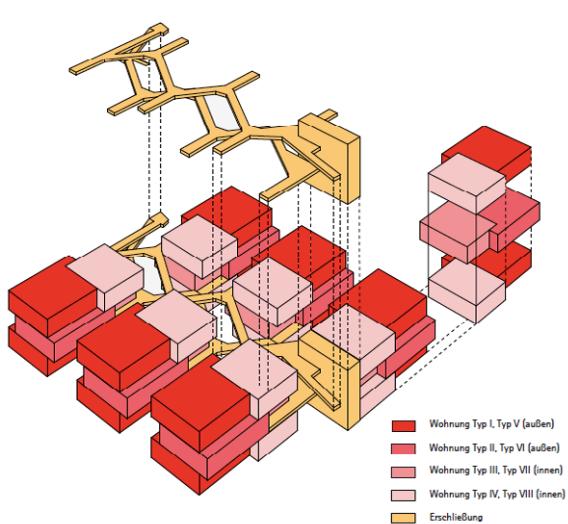
Economical
The private minimalism and scanty rooms have the same impression like "la-touristique". Therefore there are common areas and rooms for a united use.

Technological
The student hall consists of two parts, which are erected on a moraine that slopes down the north. They are divided into a full and a half floor. Each dwelling module has 4 rooms each. Two public ambulances and loggias next to the student hall are part of a good development. Furthermore, the building has 2 dwelling modules especially built for handicapped students, as they are equipped with elevators. The irregular dwelling traits extend story by story at one end to create a link between the landscape and the third floor.

Individual
Every student has a private room (10.00m²) with a scanty facility in the dwelling.

Urban
The building is situated in a central, but quiet place in Mendrisio, which is next to the road Via Agostino Maspali. The halls of residence belongs to the academy of architecture and is located near the main building distance of 10 minutes. Next to the hall of residence there is a bus stop and a railway station. The area is surrounded by trees and a big green area. The courtyard was designed by the artist Chiara Dymic.

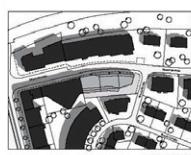
03



Axonometrie mit zentrale Erschließung und Anordnung der Wohnungstypen



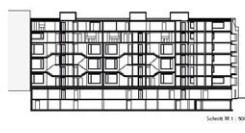
Blockrand
Mehrfamilienhaus
Siewertstrasse 10-14
CH - 8050 Zürich
EM2N Architekten
Baujahr 2005 - 2006



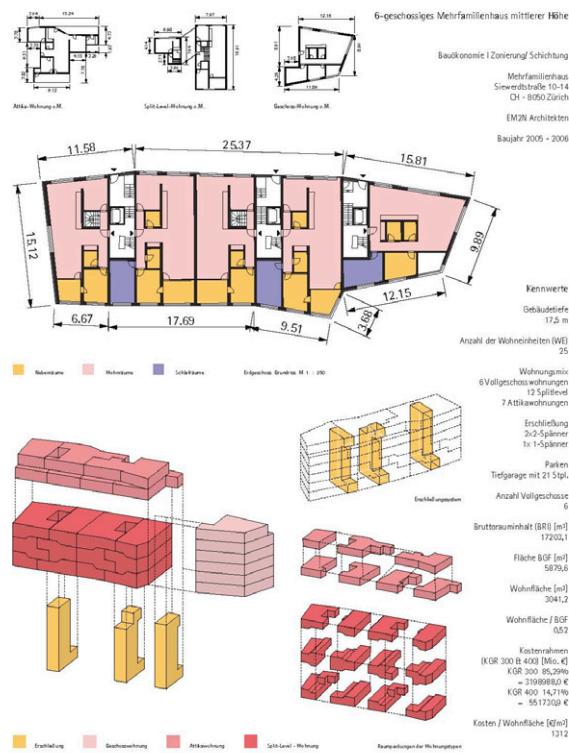
Bei dem vorliegenden Neubau haben EM2N Architekten ein Apartment House geschaffen, das aus der sonst wenig spektakulären Umgebung mit seinem braunen Putz, seiner viergeschossigen Höhe und den direkt zugemieteten Wohnungsgrundrissen heraussticht. Mit großen Panoramafenstern wird ein großes Maß an Tageslicht reflektiert. Die neuartige Dachbildung sowie eine begünstigte Nord-Süd-Entstreckung der nahezu liegenden Baufelder versprechen einen guten Lichteinfall in die Räume des Haupttreppen der Wohnung, die sogenannte Hauptschwelle, verdeckt. Jede Wohnung, von der Zweizimmer- bis zur Fünfzimmersuite, weist eine individuelle und überzeugt mit durchdachten Wohnungsgrundrissen. Dabei rückt der Gedenke, mehrstellende sich in einer Mischwelt aus Wohnungen und Büros. In der Gesamtheit des Objektes ist dem Team von EM2N ein Konzept gelungen, das an vorgebauten und verwirklichten Siedlungen sieht und den Erwartungen des Betrachters, die eine solch herausgehobene Fassade verpflichtet, gerecht wird.



Ansicht Fassade Nord M 1 : 500



01



M. Meier, H. Preusche, R. Richter, J-E. Raupach - SS 11

02

Exemplary Student Project: Compendium Submission page 1 (documentation) and page 2 (analysis). All drawings including plans, sections and elevations are student's drawings based on published project details and conform to the standard layout of the compendium.

Student Course Evaluation

Having the course evaluated by students towards the end of the semester is not obligatory at BTU, but the chair considers this a valuable instrument to receive feed back on a course.

One student per working group completed a questionnaire for this purpose, which resulted in 30 questionnaires being returned to the evaluations office.

The overall feed back was very good. The feedback on workload, content, structure, administration was in line with previous years.

Conclusions

The following conclusions reflect the experiences which were made withing the specific teaching and learning environment at BTU. Having outlined these sepcifics as part of this report, we believe that our findings may be applied to other courses and teaching environments.

- Existing modules can be modified to blend into the OIKODOMOS Virtual Campus, even if they are based on joint teaching (multiple Chairs) and large numbers.
- Students considered the OIKODOMOS component as positive challenge, which led to the enhancement of their work.
- The presentation of digital content as part of an analogue presentation setting worked well.
- The simultaneous use of eLearning/ eAdmin platforms may be leading to increased administration requirements.
- The Lecture/Exercise format sets limits to both, direct interaction between students and teacher as well as students/teacher and OIKODOMOS.
- The process was difficult to be embedded into external feed-back loops (evaluations, commenting), as it was not part of an OIKODOMOS Workspace interaction, and it was submitted as „final product“ towards the end of the semester rather than a „work in progress.“
- However it was helpful for us to have our interactions confined to only one element of the Virtual Campus. Interactions within a workspace while working for the Case Repository would have been, with the experience we have now, probably too deemanding for a start.
- The Module requirements and the joint teaching mode with chair B and C, in combination with the Virtual Campus produced dual use of German and English language which could be considered an issue if consistency and uniformity is of importance.
- The „learning by doing“ approach proved to be feasible for both, teaching staff and students. We consider this to be important as it allows participation in the Virtual Campus without having a lengthy set-up time.

- The OIKODOMOS User Manual(s) provided valuable information to assist our start. It could be extended by further recommendations on teaching methods, course integration options etc. (for teachers).
- To administer large groups requires to deal with long lists of personal data. For this reason, the setting-up of user accounts and making amendments should be kept as simple as possible.

Outlook:

Following our first and very positive contact with the OIKODOMOS Virtual Campus during summer semester 2011 we have now joined the workspace „Housing Reagents“ with a design project on master level. We have applied similar means in terms of introducing the students to the Virtual Campus. Our previous experience has helped us to respond to the new requirements of a different mode of interaction. It has also facilitated the shaping our new learning activities. We found it very helpful having met up with the partners of the workspace at the beginning of this project.