university of Oregon - school of architecture and allied arts - department of architecture architectural design - arch 484/584 winter 03 - prof. nancy cheng

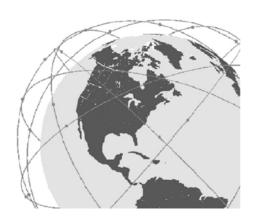
12T INDIVIDUAL TO TEAM CENTER course syllabus

Work and leisure in a flexible structure

OBJECTIVES

This course will develop a student's

- Understanding of team work and environments for teams
- Ability to develop ideas from room scale up to urban scale
- Ability to combine traditional and digital media in a personalized design process
- Understanding of how digital technology is reshaping our environments and practices



PROJECT PREFACE

Where and how we work has dramatically changed over the last few years. Modern telecommunication and global teams are enabling new business models. Lifetime employees are being replaced by consultants moving from project to project in flexible, efficient temporary teams. As specialists working together proceed to the next employer, social and economic relationships quickly shift. These emerging micro-enterprises require a new kind of flexible environment.

What will it mean to work and live together in this new situation? How can we facilitate rapport while accommodating privacy and reflection? How can sensors and networks complement face-to-face interaction?

PROJECT APPROACH

There are few architectural precedents for this kind of social development. For this I2T project we will research how an architectural environment should be shaped to accommodate temporary work groups. We will envision how a facility can encourage intense cooperation for groups of different sizes. The flexible environment should adapt to different organizational clusters, from 3 to ~30 people working together, with some in residence and additional members networked remotely. Each unit should incubate individual thinking while stimulating productive teamwork. As a relief from the intensive project focus, the center needs to provide recreational opportunities and connection to local urban surroundings.

COLLABORATION

To better understand teamwork, our class will have a short-term collaboration with students at the University of Stuttgart who began developing urban schemes in October. We will work together on a typical module-unit using email and Web postings for communication.



SITE LOCATION

Frankfurt, a major European banking and business center, provides the perfect setting for this structure. The project is situated at a central point in the city, in the air rights over the railway tracks at the main railway station, Hauptbahnhof. This location provides an opportunity to create a gateway to the city. In creating the new building, the quality of the existing railway station experience should remain the same or be improved, in terms of ventilation and lighting.

METHODOLOGY

Students will:

- approach design as discovery, alert for emerging ideas
- use transformations to generate alternatives for evaluation and refinement
- try media processes such as diagramming, sketching, found-object models, collage, 3D modeling, media hybrids, etc.
- use a sketchbook and Web page for reflection and sharing

EXPECTED BEHAVIOR

Students are expected to take responsibility for their own learning:

- Come to each class prepared. Students who miss 3 classes or are frequently late risk getting a No Pass.
- Foster a learning community: Contribute to class discussions, activities and resources. Respect others. Learn from different backgrounds, opinions & talents
- Communicate: Learn by asking questions. Sign up for crits at least once or twice a week. Check in or leave a note if you leave the studio. Email or phone instructor, come by office hours.

PROJECT REQUIREMENTS subject to revision

sketchbook: 10 minutes a day recording delight website with research and project information research on activity study, Frankfurt, construction

explanation of the modular work environment concept, modular unit plan & section 1:50, model or 3D drawings

explanation of the urban concept, site plan 1:500, plans, sections, elevations or other appropriate representations approx. 1:200, model 1:200, building section 1:50, reference construction images or details

EVALUATION

Students will be evaluated on quality of design thinking, design media for process and presentation, and study skills according to the standard 4/584 departmental criteria.

MEDIA & EQUIPMENT

Students are encouraged to use design media strategically for design objectives. I encourage experimentation in sketching on trace and grid paper and sketch models, moving gradually into 2D CAD drawings and 3D models to study alternates and use dimensional precision. Students need to have their own metric scale and are highly encouraged to have a computer in studio and frequently printout digital work for reflection and reworking.

SCHEDULE subject to revision

- I. Room Scale Design (3 weeks)
 - A. Dimensions of teamwork research
 - B. Modular suite design
 - C. Aggregated module development
- II. Architecture and Urban Design (6 weeks)
 - A. Frankfurt Hauptbahnhof site study & model
 - B. Urban connections, program organization & massing
 - C. Structural development
 - D. Building core, circulation & public space options
 - E. Exterior development
 - F. Recycling
 - G. Presentation

INSTRUCTOR

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Office hours for Winter'03: W 11:00-12:50