

Designing Architecture with Bamboo

Course Outline

2024

Course Date	23 June 2024 – 6 July 2024
Class Hours	45 contact hours plus 1.5 hours digital lecture (Zoom) before coming to Frankfurt. Total 46.5 contact hours.
Lecturer(s)	<p>Andrés Böppler</p> <ul style="list-style-type: none"> • Main Lecturer on designing and building with bamboo at University of Applied Science RheinMain and other universities around the world. German Architect BDA; proven pioneer in structural building with bamboo (FIBRA AWARD); Project developer for social education projects in Colombia in collaboration with the German Federal Ministry for Economic Cooperation and Development. <p>Mark Bramwell.</p> <ul style="list-style-type: none"> • Lecturer (ret.) in Intercultural Communications at Frankfurt University of Applied Sciences. State examiner in intercultural competence for the German Chamber of Commerce and Industry. <p>Ulla Schuch.</p> <ul style="list-style-type: none"> • Lecturer for Open Space Design in Urban Context. Substitute professor in the international master's program Urban Agglomerations, responsible for Urban Open Spaces at Frankfurt University of Applied Sciences. Project management for green social education projects in Colombia in collaboration with the German Federal Ministry for Economic Cooperation and Development. CEO of the holistic learning platforms Deutsche Gartenakademie (German) and Empowerment Bamboo (English).
Course Description	<p>This course provides insights into the use of bamboo as a building material, taking into account the local, ecological, economic, social, urban and cultural context. Building construction principles are taught in order to develop individual and site-specific architecture with bamboo:</p> <ul style="list-style-type: none"> • Properties of bamboo as a building material • Building construction principles • Implementation of findings into an architectural language • Guided design process from idea to architectural model • Basic intercultural mindset • Verification of local identification with the work product
Learning Outcomes and Task	<p>This course aims to teach constructive, architectural and intercultural thinking as well as skills for the use of bamboo as a building and design material:</p> <ul style="list-style-type: none"> • Knowing and understanding the basic architectural and structural principles for building with bamboo • Application of the basic construction principles in architectural design • Experimental proof of what has been learned using a model made of bamboo skewers

	<ul style="list-style-type: none"> • Understanding of bamboo as a building material in the local, social and cultural context • Understanding of bamboo as a quickly renewable building material and massive CO2 storage • First experiences in intercultural and interdisciplinary collaboration
Course Method	<p>This course is designed as a mix of different interactive teaching methods.</p> <ul style="list-style-type: none"> • Imparting specialist knowledge • Application of what students have learned through theory and exercises (sketches and models) • Case studies • Experimental exercises • Critical Incidents • Group discussion • Work in small groups • Impulse presentations • Structured group activities in the plenary session • Exhibition objects to secure results
Course Materials	<p>All materials are included in the participation fees and will be made available to students during the summer university. (Sketch paper, pens, simple wooden model board, bamboo shish kebab skewers, scissors, superglue, printing out posters)</p>
Credits	<p>Students will earn a total of 6 ECTS points for the successful completion of the course.</p>
Assessment	<p>Presentation, written documentation, model, poster</p>
Grading	<p>Students will be graded through participation and final assessment.</p>

GENERAL INFORMATION

Assessment and Credits

Upon successful completion of the summer course, students will be awarded 6 ECTS points. A single ECTS point is defined as the equivalent of 25-30 hours of student workload, which includes pre-lecture via Zoom, homework, class hours, readings, preparation for class activities, as well as an assessment measure. Learning will be assessed at the end of the summer course. Lecturers will inform students about the assessment measures at the beginning of the summer course. Students will receive a Transcript of Records showing their grades earned in the course. This document can be presented to their home institution for credit.

Grading

Grades will be awarded based on the German grading system:

German	Sehr gut 1,0-1,5	Gut 1,6-2,5	Befriedigend 2,6-3,5	Ausreichend 3,6-4,0	TN Teilnahmeschein	LN Leistungs- nachweis	Nicht bestanden 5,0/ 6,0	
	very good	good	satisfactory	pass	Non exam paper	Exam/paper	not passed	
Americas	A 1,0-2,3		B 2,4-3,0	C 3,1-3,5	D 3,6-4,0	participated	passed	failed
European	A 1,0-1,5	B 1,6-2,0	C 2,1-3,0	D 3,1-3,5	E 3,6-4,0		FX/F 4,1-5,0	

Email and campUAS Online Learning Platform

Students are encouraged to use campUAS, our E-Learning Platform. Using campUAS enables students to access course materials and stay informed about extracurricular activities. We also expect students to check their emails on a regular basis.

Class Participation

Class participation is considered a requirement for successfully completing the program. Student questions, answers, comments, and insights over the course will not only benefit the whole class, but it will also ensure that students have a better understanding of the class material and contribute to their overall academic success.

Attendance

Students should attend each class. Students also need to inform their lecturer if they need to miss class. This can be done in person or via email.

Academic Honesty

Students caught cheating or plagiarizing will fail, at our discretion, either the assignment in question or the entire program.