南京大学建筑与城市规划学院建筑系

教学年鉴 2010—2011

THE YEAR BOOK OF ARCHITECTURE PROGRAM

2010-2011, Volume 11

SCHOOL OF ARCHITECTURE AND URBAN PLANNING

NANJING UNIVERSITY

东南大学出版社

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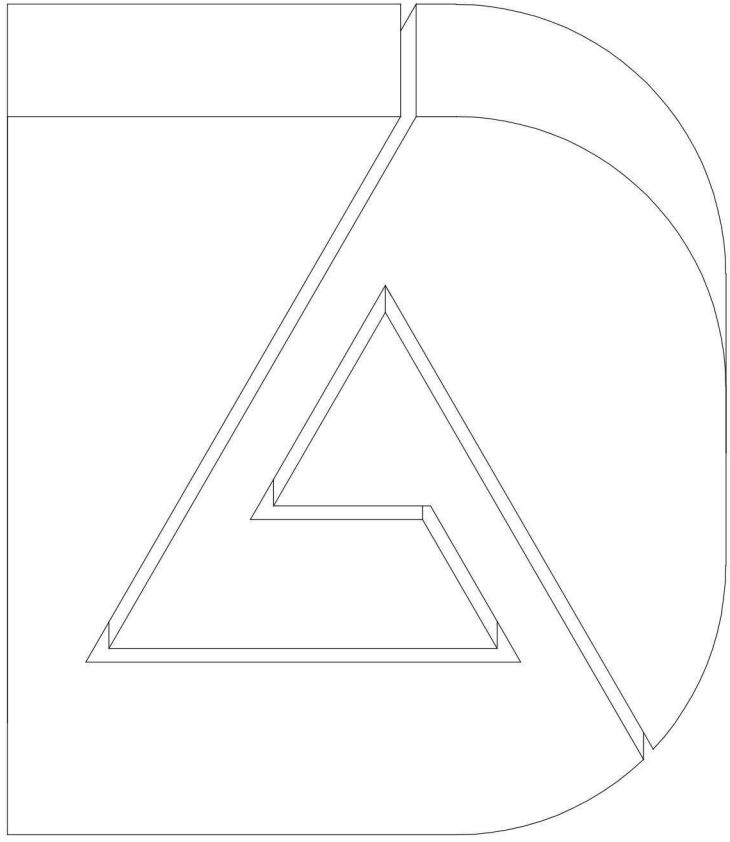

图书在版编目（CIP）数据

南京大学建筑与城市规划学院建筑系教学年鉴. 2010—2011 / 南京大学建筑与城市规划学院编. -- 南京：东南大学出版社，2011.12
ISBN 978-7-5641-3183-8

Ⅰ ①南… Ⅱ. ①南… Ⅲ. ①建筑学—教学研究—高等学校—南京市—2010—2011—年鉴②城市规划—教学研究—高等学校—南京市—2010—2011—年鉴 Ⅳ. ①TU-42

中国版本图书馆CIP数据核字(2011)第254720号

出版发行	东南大学出版社 南京市四牌楼2号 邮编 210096
出 版 人	江建中
网 址	http://www.seupress.com
邮 箱	press@seupress.com
经 销	全国各地新华书店经销
印 刷	南京新世纪联盟印务有限公司
开 本	889mm × 1194mm 1/20
印 张	10
字 数	450千
版 次	2012年1月第1版
印 次	2012年1月第1次印刷
书 号	ISBN 978-7-5641-3183-8
定 价	58.00元

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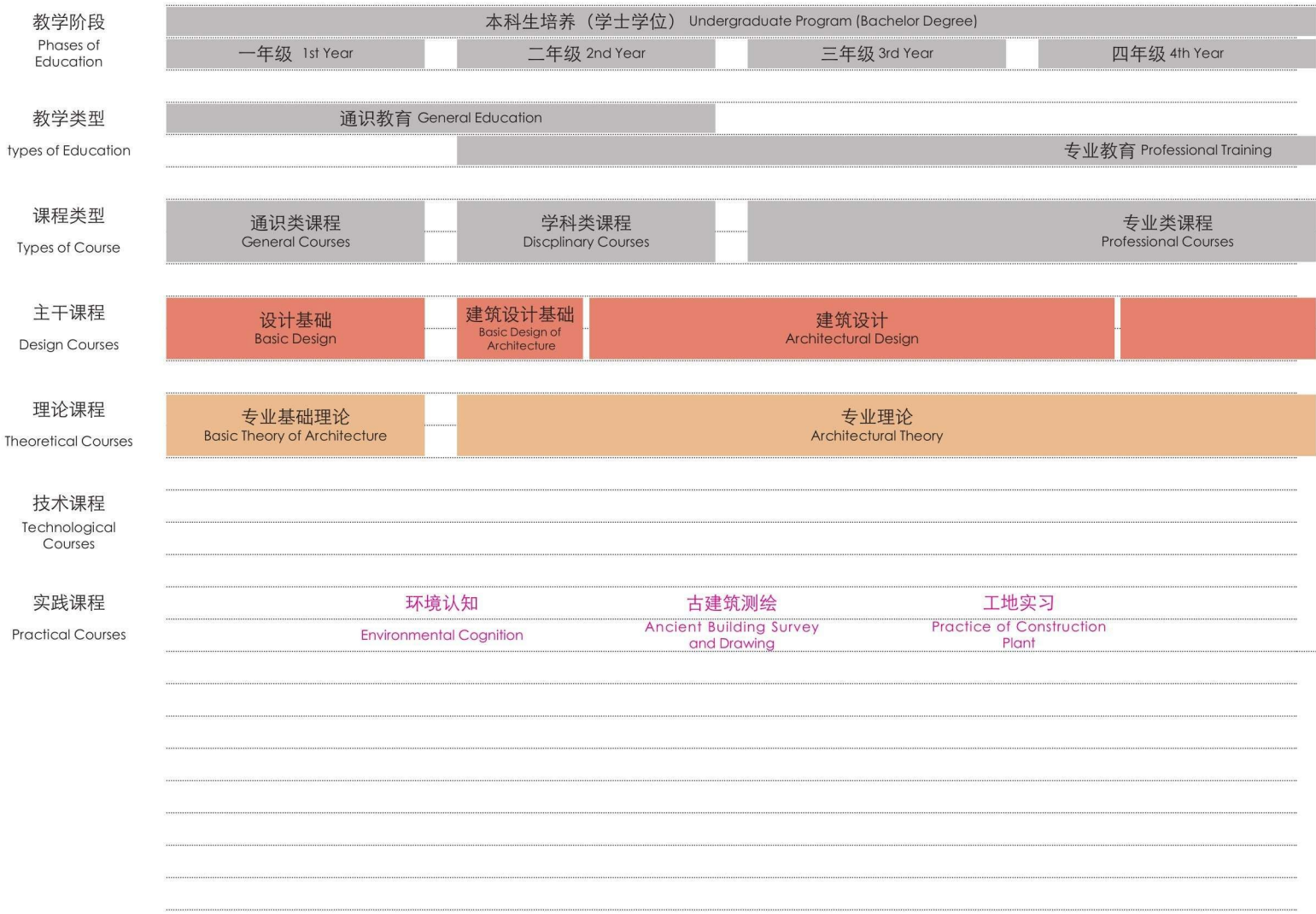
School of Architecture and Urban Planning

Nanjing University

arch@nju.edu.cn　　http://arch.nju.edu.cn

教学纲要



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Practice of Profession

生产实习
Practice of Profession

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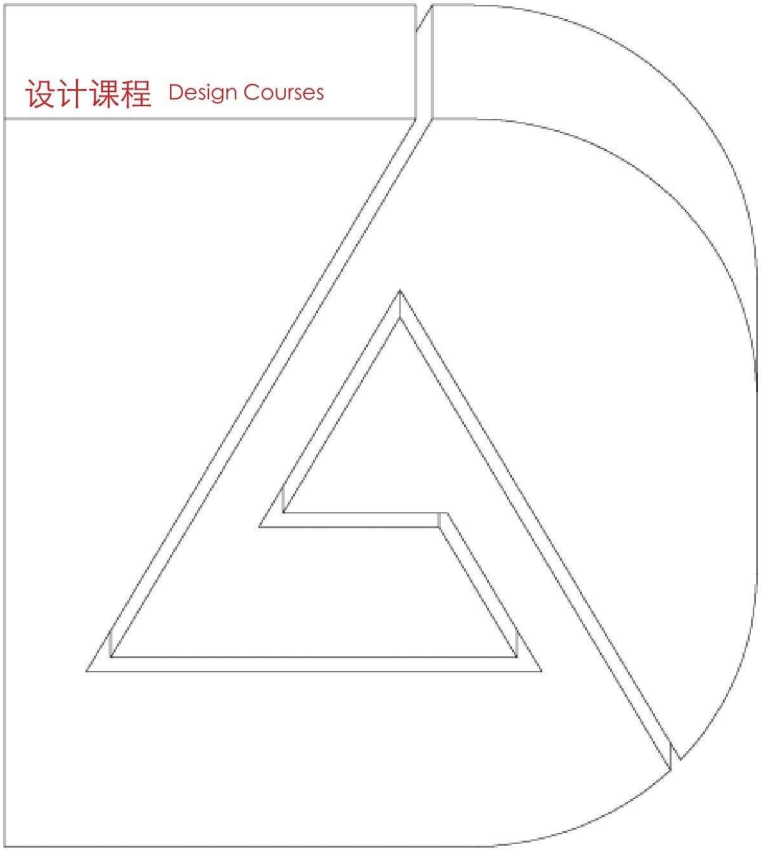
设计课程 Design Courses



设计基础 · 季鹏 庄纾 庞蕾

课程类型：必修

学时学分：72学时/2学分

课程简介

本课程的主要任务是让原本没有任何绘画基础和设计概念的建筑专业新生，在进入建筑学的专业学习之前，通过接触艺术院校设计学院的艺术设计基础课程，培养学生基础性的造型表达能力和设计思维能力。

教案的基本构架借鉴了完善的艺术设计基础课程，并结合建筑设计专业的专业特色，将艺术感受和造型表达作为教学的重点。课程总体分为三个阶段，也是艺术设计基础课程中最为基础的三个方面，每个阶段有其特定的认知对象和表达方法，具体通过相应的课题来实现理论与实践的结合，使得学生能够迅速适应从高中学习到大学设计专业学习的转型，为进入建筑设计专业学习掌握一定的设计表达能力和提高一定的美学修养打下坚实的基础。

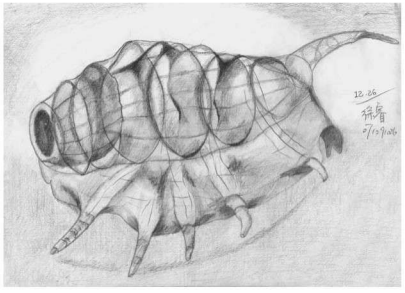
教学的每个阶段既相对独立也相互作用，融会贯通才是打开设计之门的钥匙。设计基础课程重要的在于引导学生通过动脑想和动手做，体会从思维概念到设计表达的一般法则。

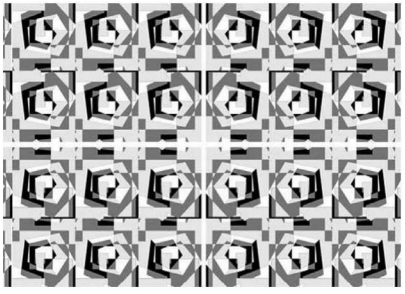
Brief of Course

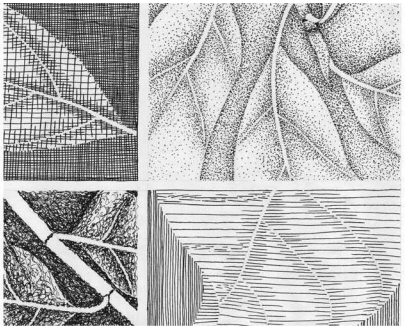
This Course is mainly designed to cultivate the fundamental modeling expression ability and design thinking ability of the architectural freshmen who have no drawing basis and design conception by studying basic arts design courses of the design academy of the arts college before commencement of the professional architecture study.

The essential framework of the teaching plans refers to the improved basic arts design courses, combines the professional features of the architecture design major, and focuses on the art feeling and modeling expression. This Course generally includes three stages, which are also the three basic aspects of the basic arts design courses. Each stage has its specific cognition objects and expression methods, and specifically realizes the combination of theory and practice through corresponding subjects, and enables the freshmen to be able to promptly adapt to the transformation from senior high school to professional design major in the college, and thus lays a solid foundation for the freshmen to master certain design expression ability and improve certain aesthetic accomplishment.

Individual stages of the teaching are not only independent, but also interactive, so gaining a thorough understanding of the subject through mastery of all relevant material is a key to open the design door. What it is important for the design basic courses is enabling the freshmen to understand the general principles from the thinking conception to design expression by instructing the freshmen to think and do.







Undergraduate Program 1st Year

Basic Design · Ji Peng, Zhuang Shu,Pang Lei

Type: Required Course

Study Period and Credits：72 hours/2 credits

造型基础

自行车的解析变体

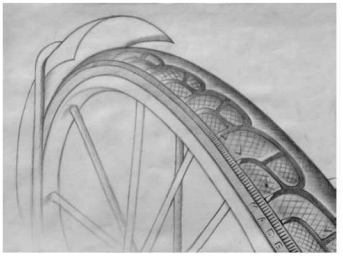
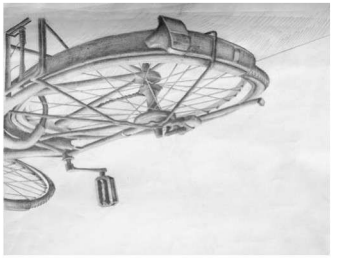
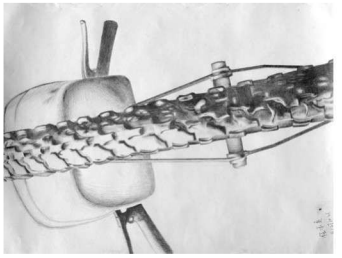
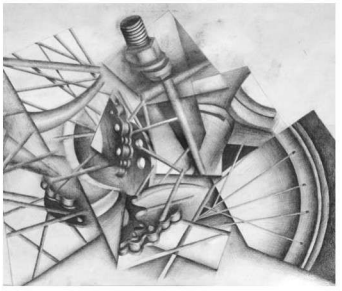
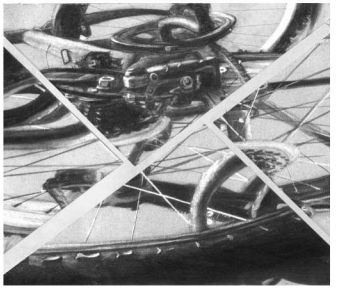
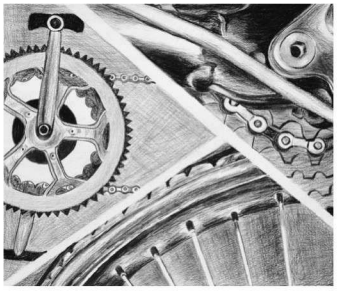
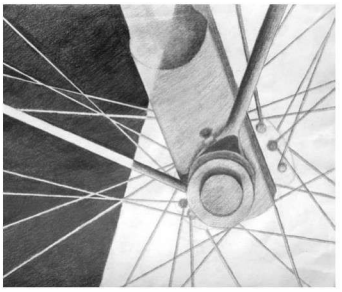
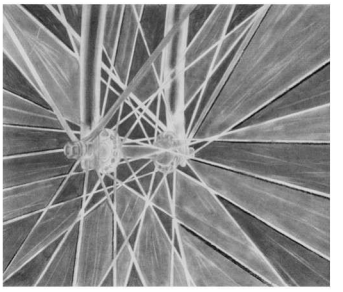
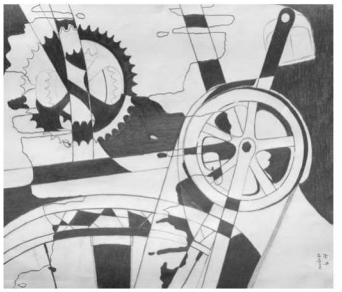
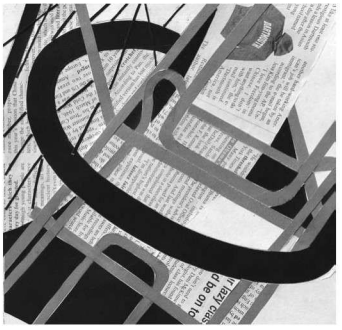
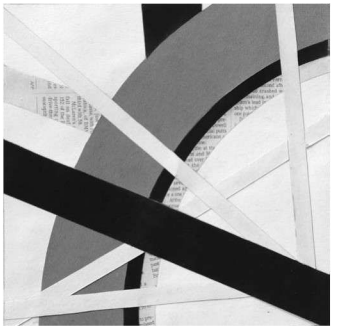
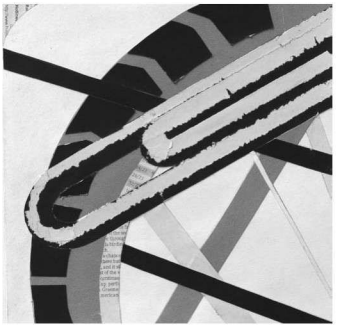
自行车的造型对学生而言再熟悉不过，但如何从熟悉的自行车造型中感受到设计表达的非同寻常，是造型基础单元的教学内容。首先让学生去观察自行车这一结构复杂的日常用品，通过贴近观察、局部放大、叠加透视等反常规方法进行观察，可结合相机、手机等电子产品帮助记忆。根据超乎常规的观察结果，让原本明了的自行车造型逐渐陌生化，再以写实的手法完成具有抽象视觉效果的素描作业。在素描作业的基础上，将原画面分解成黑、白、深灰、浅灰四个色阶的平面化图像，用黑卡纸、白卡纸、灰卡纸和英文报纸为材料，完成灰度表达的抽象拼贴。

在教学过程中，学生们感受了如何从设计的角度来观察一个特定物质，尝试造型艺术的素描基本表现技法；其次通过三维物质的二维转化和灰度解析，初步接触了现实场景的抽象表达，建立起从具象到抽象的设计思维意识。

Form Basics Analysis and Variant of Bicycles

How to feel the uniqueness of the design expression from familiar modeling is the teaching contents of the basic modeling module. To start with, the freshmen are requested to observe a bicycle — an article for daily use with complicated structure. The unconventional methods such as close observation, local amplification and superposition perspective are used for observation, and the electronic products such as cameras and handset are used for memory. Based on the unconventional observation results, the modeling of the bicycle that is clear is gradually becoming stranger, and then the realistic writing is adopted to complete the sketch with abstract visual effect. On the basis of the sketches, the original frame is decomposed into plane images with such four color gradations as black, white, deep gray and light gray, and the black cardboard, white cardboard, gray cardboard and English newspaper are used as materials to have the abstract patching of gray scale expression.

In the course of teaching, the freshmen experience how to observe a specific substance from the angle of design and trying of basic performance methods of sketches of modeling arts, and preliminarily contacted abstract expression of actual scene through two-dimensional conversion and analysis of gray scale of the three-dimensional substance, thus establishing the design thinking consciousness from concretion to abstract.

色彩基础

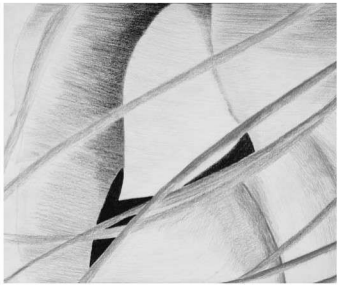
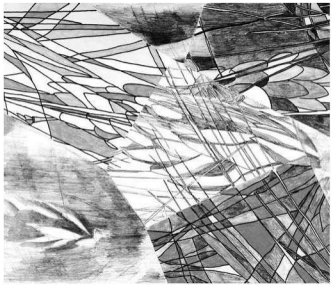
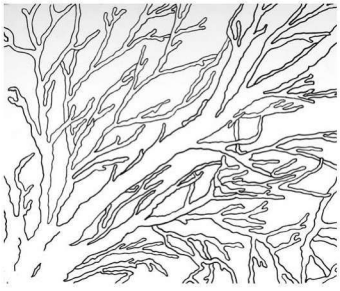
色彩归纳

以平涂的方式对中外优秀经典色彩案例进行色彩归纳，以平涂式的色块呈现色彩关系，体验色彩三要素的微妙变化，以及色调色性，色彩的对比与调和对画面的影响，色彩搭配的经验、规律与方法。

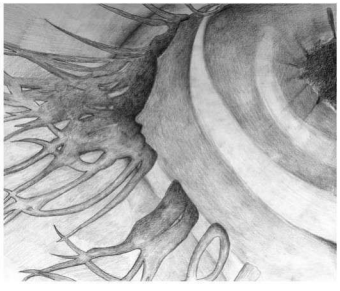
Color Basics

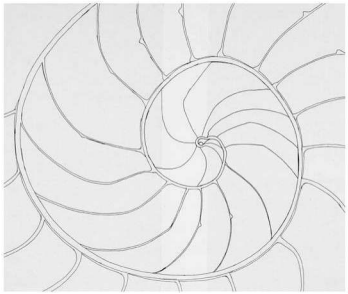
Color Induction

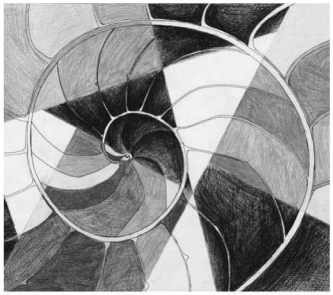
The pastel washes are used for color induction of excellent classic color cases at home and abroad, and the color relationship is presented by pastel washes typed color lump, thus experiencing delicate changes of three elements of color, influences of comparison and harmony of color on images, experience, law and methods of color matching.









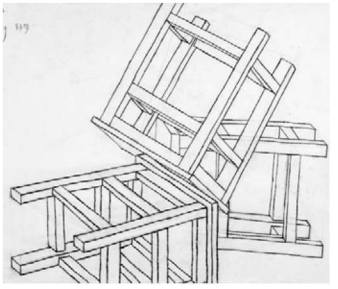
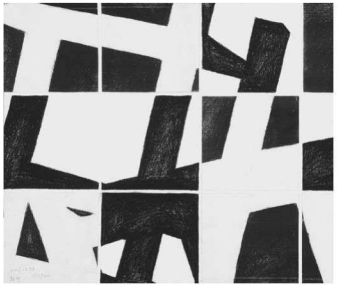
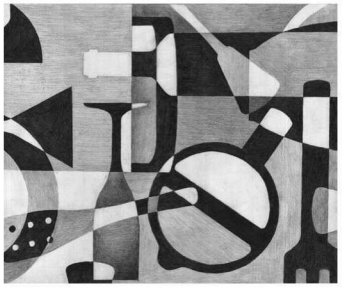
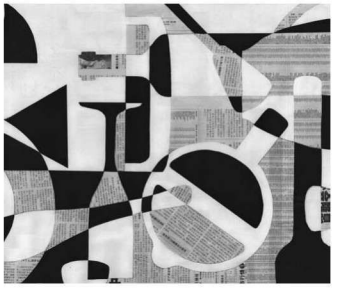
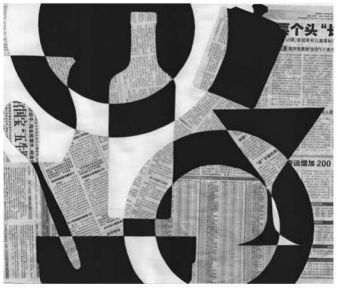
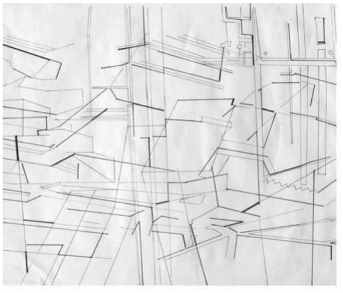
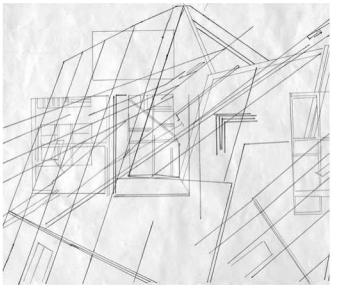
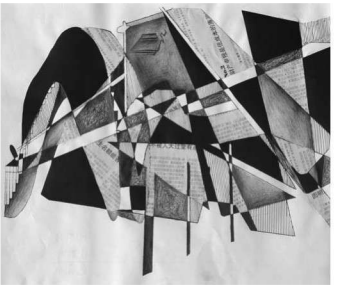
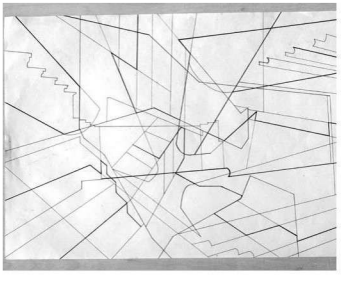
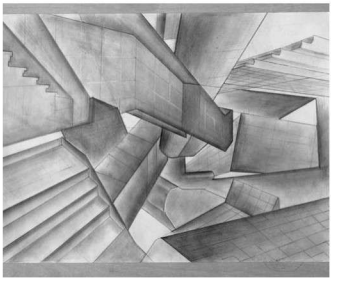
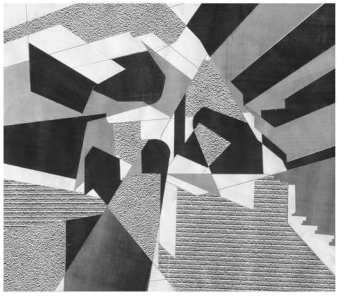
形式基础

从线描写生到正负形

我们所感兴趣的并非那种图形和背景截然分明、互不混淆的情形，而是那种图形和背景的关系可以随着注意力的转移而相互转换的情形。作为一个设计课题，我们的目的就是创造一种图形关系，它能够使观者得到图形和背景互换的视觉体验。

Form Basics
From Sketch Drawing to Positive and Negative Forms

What we are interested is not the situation of graphics and clear-cut background, but how the relationship between graphics and background can shift with focus conversion. As a design project, our intention is to create a graphical relationship, which enables the viewer to have visual experience of interchange between graphics and background.

拷贝建筑

从优秀建筑类案例图片中寻找与发现形式，根据观察与理解，选择某些明显的或隐藏的线条进行拷贝，通过某种观察与观看的方式生成富有意味的视觉形式。

拼贴建筑

将作业一中生成的视觉形式用瓦楞纸或美术纸进行拼贴，经过裁切、拼贴、置换、选择、镂空、折叠、安装等，实现从单一的线到点线面丰富语汇的转化，探索与思考元素在画面中的作用与关系。

Copying of Architecture

It is required to seek for and find form among excellent architecture case pictures, and then based on observation and understanding, select some obvious or hidden lines for copying, and generate the significant visual form by some observation and watching means.

Collage of Architecture

The corrugated paper or art paper is used to join the form of vision generated in Exercise One together. After cutting, patching, replacement, selection, hollowing, folding, installation, etc., the form of vision is realized transformation from single line to rich combination of dot, line and surface, thus exploring and thinking the role and relationship of the elements in the image.

建筑设计基础 •丁沃沃 刘铨 冷天

课程类型：必修
学时学分：72学时/4学分

建筑设计课程第一年的主要任务是让原本对建筑学一无所知的新生建立起基础性的专业知识架构。其主要内容就是建筑认知和建筑表达。认知是主线，表达是方法。认知成果需通过表达方式得以检验，而表达效果和认知成果直接对应。

教案的基本架构是在重新认识建筑基础知识的前提下，将认知与表达作为这门课的教学主线，依照循序渐进的原则，分四个阶段设置了不同的教学任务，每个阶段有其特定的认知对象和认知方法，同时每个阶段的训练都建立在之前一个阶段学习要点的基础上，力图更好地使学生通过认知的过程从一个外行逐步进入专业领域，并为后续的学习打下宽阔和扎实的基础。

其中第一学期的建筑设计基础课包含了前三个阶段的教学任务，第四阶段的教学安排在第二学期的建筑设计1课程之中。

建筑的形象对于新生来说并不陌生，但如何“专业地”看待和表述它就是新的知识。因此在第一个阶段就将认知对象设定为学生身边经常看到、接触到的建筑，让学生利用已有的建筑体验，学会“专业地理解”建筑；利用已知的表达过程，学会“专业地表达”建筑。学生从学习之初就能在形象与抽象间建立思维上的关联。

在教学的初始阶段，学生首先通过理解“投形”的概念来了解三维的真实建筑是如何被二维平立剖面图所描绘的；其次通过理解图纸比例的概念来了解不同的图纸传达的不同层次的建筑信息。

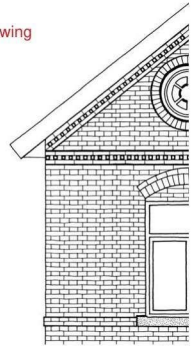
认知建筑

徒手平立剖面图绘制

建筑立面测绘
Elevation Drawing

建筑平面与剖面测绘
Plan and Section Drawing

窗构造测绘
Detail Drawing



The first year is the initial in the academic education of architectural design. How to make the new architectural students set up the professional knowledge system in Chinese education practice is the fundamental task.

Based on review of the basic knowledge of Architecture, we take cognition and representation as the major ideas and set the program into four step-by-step sections. Specific cognitive objects and cognitive methods are given in different sections and the teaching program of each section is based on the knowledge of previous sections. Our program tries to set a wide and well-knit background for the subsequent design course.

“Basics of Architectural Design” consists of first three sections in the 1st semester. The last section takes place in the 2nd semester as “Architectural Design 1”.

It is new knowledge to read and describe the buildings professionally for the fresh students. The first phase is to make the students use professional drawings to understand and record the buildings which they face everyday, to combine the concrete figure and abstract drawing: firstly, how to use the plan, section, elevation to describe a building; then, how to use different scales to express specific information.

Undergraduate Program 2nd Year

Basic Design of Architecture • Ding Wowo, Liu Quan, Leng Tian

Type: Required Course

Study Period and Credits：72 hours/4 credits

这一阶段的教学沿用了前阶段的知识，将图示作为认知的对象，学生通过阅读图纸来制作相应比例的实体模型，在思维过程中完成一次认知上的反馈。 能按图示进行操作、还原三维建筑空间也是检验上一阶段学习效果的最佳办法。学习的关键不在于认识图示，而在于能否通过阅读图示来感知相应的实体与空间。

上一阶段从具象的实体到抽象的图的过程在这一阶段被反转，学生通过阅读不同内容、比例的二维的平立剖面图，制作相应比例的实体模型，在思维过程中完成二维到三维的链接和转换。

认知图示

手工实体模型制作

建筑模型
Building Model

墙身构造模型
Detail Model

In phase 2, the perception process is reversed: students read the architectural drawings to make the physics model with specific scale. The process accentuates the relationship of drawing and building, as well as examines the learning effect of former study. The key point is that the capacity of transformation between 2D and 3D, abstract and concrete in students' mind.

本阶段教学将认知对象的尺度扩展到学生生活的城市层面。在全球化的今天，中国已经告别了传统的农耕时代，更加高速地进入了城市化的高潮时期。作为建筑物赖以生存的基础，城市空间直接影响到建筑的组织策略、形式策略以及建造策略。教案将城市物质肌理形态问题作为城市空间认知的基础，其内容学生也更易把握。

学生通过记录人眼视角的摄影照片、SketchUp建模与透视场景模拟、Photoshop制作的城市分析图、PowerPoint的城市调研分析报告，极大丰富了自身的空间认知与表达手段，更好地促进了其对城市空间的认知。

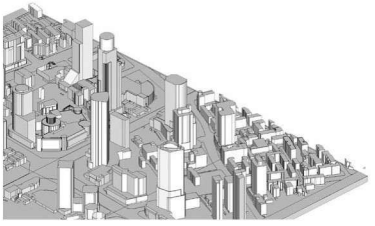
认知环境

计算机绘图与建模

传统街区
Historic Area

现代居住区
Modern Residential Area

商业中心区
Commercial District



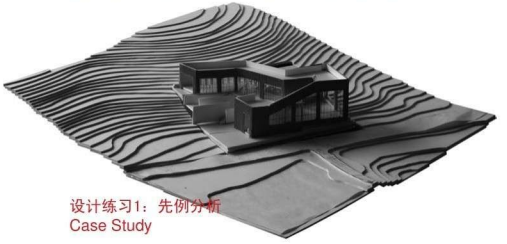
In the globalization world, the urban environment is so important to deeply influence the architectural design strategy of organization, formation and construction. Using photograph, city map, SketchUp model, and some software tools such as Photoshop and PowerPoint, the students try to understand the urban form through the drawings of street analysis, plot and building analysis and topography analysis.

在教学的最后阶段，学生通过综合运用前几个阶段的建筑知识和表达工具来亲身体验设计的操作过程。建筑设计的目的是解决人们对建筑的需求问题。因此，在设计教学中首先需要引导学生认识与发现基本的建筑问题。

就建筑设计基础教学而言，这些基本问题就是：功能与空间、场地与环境、材料与建造。建筑的使用需求是建筑产生的第一要素，建筑的场地是建筑物形体决策的限定因素，材料和结构是建筑物体的基本构成，三者缺一不可。初学者应由单项问题入手，才能较好地理解和体验解决问题的过程。

认知设计

综合的建筑表达与运用



设计练习1：先例分析
Case Study

设计练习2：功能与空间
Facade Design for a Shop

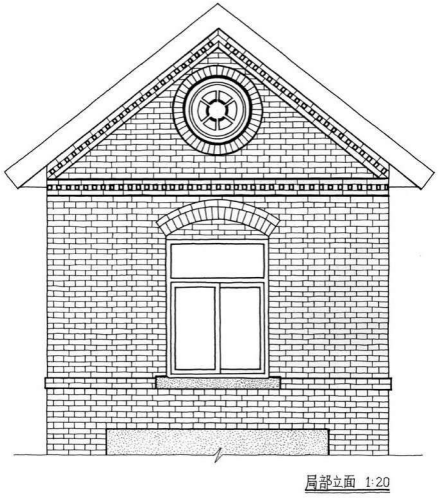
设计练习3：形式与构造
Shop Design in Historic Area

小型公共建筑设计：场地与建筑
Tea House Design in Natural Park

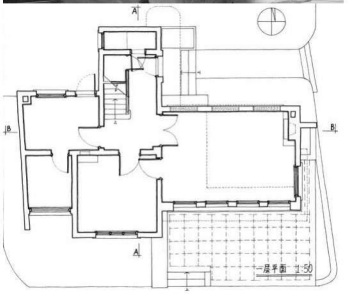
At last, students need to use all the architectural knowledge and drawing tools to resolve some basic design issues: program vs. space; site vs. environment; material vs. construction. As an easy way, the students can start with one single issue to better understand how the problem to be resolved in the design procedure.

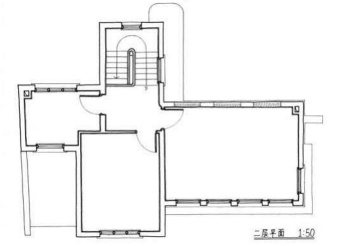
本科二年级

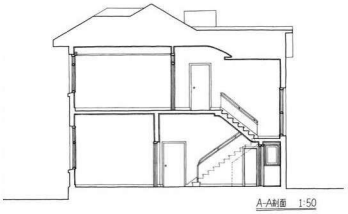
建筑立面测绘
Elevation Drawing



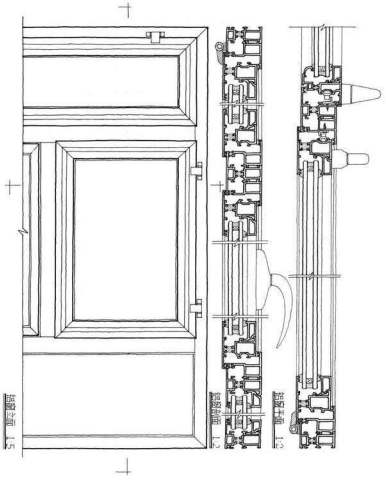
建筑平面与剖面测绘
Plan and Section Drawing



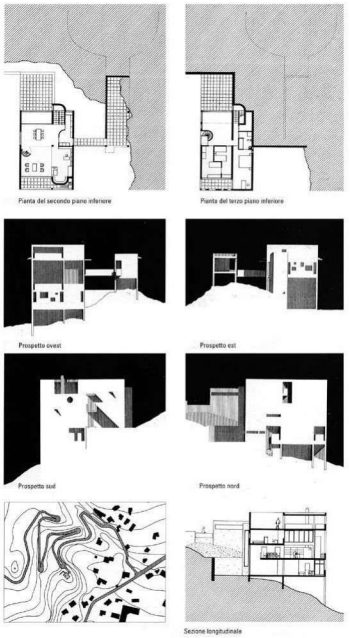


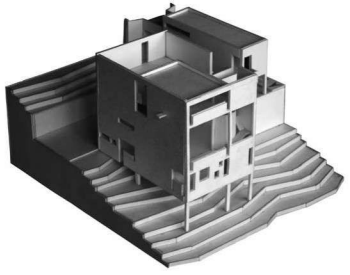


节点测绘
Detail Drawing

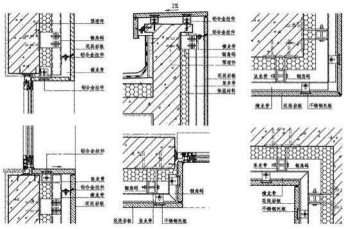


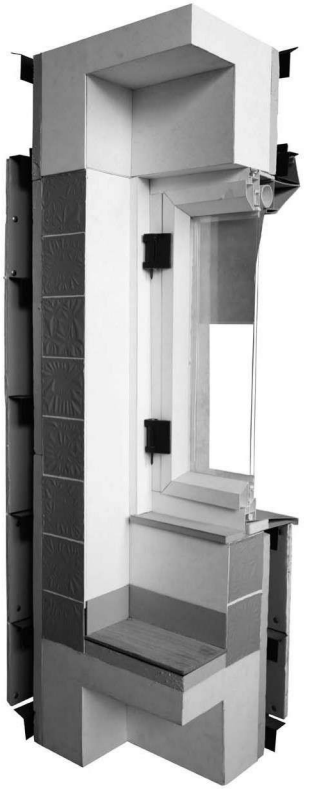
建筑模型
Building Model





节点模型
Detail Model





城市环境认知
Cognition of Urban Space