

课程详述

COURSE SPECIFICATION

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问，请联系授课教师。

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	课程名称 Course Title	艺术设计与科技文化 Art Design and Science and Technology Culture				
2.	授课院系 Originating Department	艺术中心 Arts Center				
3.	课程编号 Course Code	GEM045				
4.	课程学分 Credit Value	2				
5.	课程类别 Course Type	通识选修课程 General Education (GE) Elective Courses				
6.	授课学期 Semester	春季 Spring /秋季 Fall				
7.	授课语言 Teaching Language	中文 Chinese				
8.	授课教师、所属学系、联系方式 (如属团队授课, 请列明其他授课教师) Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	郭祎 GUO YI				
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	无 NA				
10.	选课人数限额(可不填) Maximum Enrolment (Optional)					
11.	授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other (Please specify)	总学时 Total
	学时数	32	2			32

Credit Hours

--	--	--	--	--

12.	先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 NA
13.	后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 NA
14.	其它要求修读本课程的学系 Cross-listing Dept.	无 NA

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

让学生了解艺术设计与科技文化在人类文明发展的漫长历程中在互渗互补中获得不断的发展和完善，目的是提升学生对设计行业的了解，训练培养学生的文理跨学科思维能力以及创新能力。

Let students understand that artistic design and science and technology culture have been continuously developed and perfected in the long process of human civilization development through mutual infiltration and complementation. The purpose is to improve students' understanding of the design industry and train students' interdisciplinary thinking ability and innovation ability of arts and sciences.

16. 预达学习成果 Learning Outcomes

完成课程后，学生将具备以下能力：

(1) 掌握艺术设计与科技的基本原理和基本知识，培养学生发现问题、解决问题的能力。

(2) 能够应用艺术设计与科技的知识和理论，通过文献研究以识别、表达和分析艺术设计与科技的关系，使学生能够初步使用科技手段进行艺术设计分析。

(3) 能够基于艺术设计与科技的基本原理，用发展的思维关注和了解新科技技术如何推动艺术设计发展。

Upon completion of the course, students will have the following abilities:

(1) Master the basic principles and knowledge of art design and science and technology, and train students' basic ability to discover and solve problems.

(2) To be able to apply the knowledge and theory of artistic design and science and technology, and to identify, express and analyze the relationship between artistic design and science and technology through literature research, so that students can initially use scientific and technological means to carry out artistic design analysis.

(3) Based on the basic principles of artistic design and science and technology, we can pay attention to and understand how new science and technology can promote the development of artistic design with development thinking.

17. 课程内容及教学日历 (如授课语言以英文为主，则课程内容介绍可以用英文；如团队教学或模块教学，教学日历须注明主讲人)

Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

一、理论教学部分（共 4 课时）

1. 设计的本质（1 课时）
- 2、设计的意义（1 课时）
- 3、设计的种类（1 课时）
- 4、设计的应用（1 课时）

二、设计构思与方法（共 4 课时）

1. 设计构思与方法 1 联想法（1 课时）
2. 设计构思与方法 2 例举法（1 课时）
3. 设计构思与方法 3 头脑风暴法（1 课时）
4. 设计构思与方法 4 文化创意法等（1 课时）

三、艺术设计与科技文化的关系（共 8 课时）

- 1、艺术设计哲理与科技（2 课时）
- 2、艺术设计与科学技术的内涵（2 课时）
- 3、艺术设计的科学性特征（2 课时）
- 4、案例（2 课时）

四、艺术设计与科学技术的关系发展历程（共 8 课时）

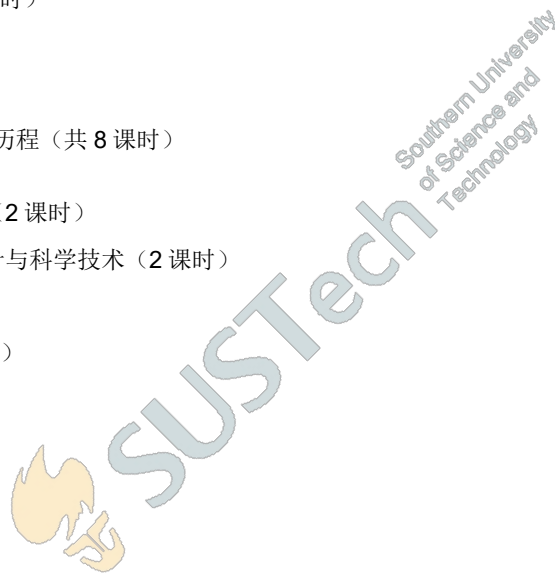
- 1、古代社会的造型装饰与科学技术（2 课时）
- 2、中世纪、文艺复兴时期的艺术设计与科学技术（2 课时）
- 3、现代设计与计算机（2 课时）
- 4、数字艺术——未来的新宠（2 课时）

五、设计案例赏析（共 8 课时）

- 1、公共艺术设计（1 课时）
- 2、建筑与环境设计（1 课时）
- 3、工业设计（1 课时）
- 4、产品设计（1 课时）
- 5、平面设计（1 课时）
- 6、视觉与交互设计（1 课时）
- 7、服装与服饰设计（1 课时）
- 8、数字新媒体艺术设计（1 课时）

1、 the theory teaching part (4 class hours in total)

(1)The essence of design (1 class hour)



(2)the meaning of design (1 Class Hour)

(3)Type of design (1 class hour)

(4)Application of Design (1 Class Hour)

2. the design concept and method (4 class hours in total)

(1) Design concept and method 1 Association method (1 class hour)

(2) Design Concept and Method 2 Example Method (1 Class Hour)

(3) Design Ideas and Methods 3. Brainstorming Method (1 Class Hour)

(4) Design ideas and methods 4. Cultural and creative methods, etc. (1 class hour)

3. the relationship between artistic design and science and technology culture (8 class hours in total)

(1) Philosophy and Technology of Art and Design (2 Class Hours)

(2) the connotation of artistic design and science and technology (2 hours)

(3) Scientific Features of Art Design (2 Class Hours)

(4)Cases (2 class hours)

4. the relationship between artistic design and science and technology development process (8 class hours in total)

(1) the ancient society of modelling decoration and science and technology (2 hours)

(2) Art Design and Science and Technology in Middle Ages and Renaissance (2 Class Hours)

(3) Modern Design and Computer (2 Class Hours)

(4) Digital Art-New Favourite in the Future (2 Class Hours)

5. design case appreciation (8 class hours in total)

(1) Public Art Design (1 Class Hour)

(2) Architecture and Environmental Design (1 Class Hour)

(3) Industrial Design (1 Class Hour)

(4) Product Design (1 Class Hour)

(5) Graphic Design (1 Class Hour)

(6) Visual and Interactive Design (1 Class Hour)

(7)clothing and apparel design (1 Class Hour)

(8) Art Design of Digital New Media (1 Class Hour)

18. 教材及其它参考资料 Textbook and Supplementary Readings

教材: 李政道: 《科学与艺术》[J], 新世纪文学选, 2009

参考书目:

- 1、吴今培,李光伟: 《系统科学发展概论》[M], 北京: 清华大学出版社, 2010
- 2、侯纯明: 《艺术与科学》[M], 北京: 中国石化出版社, 2007年
- 3、[美]温迪, 普兰: 《科学与艺术中的结构》[M], 北京: 华夏出版社, 2003
- 4、贺天平: 《科学实验之光》[M], 北京: 科学出版社, 2009
- 5、罗祯: 《源于自然的艺术》[D], 河南大学, 2011年
- 6、[英]贡布里希: 《艺术的故事》[M], 广西美术出版社, 2008

Textbook:

Li Zhengdao: "Science and Art" [J], New Century Literature Selection, 2009

Reference books

1. Wu Jinpei, Li Guangwei: "Introduction to the Development of Systems Science" [M], Beijing: Tsinghua University Publishing House, 2010
2. Hou Chunming: "Art and Science" [M], Beijing: China Petrochemical Press, 2007
3. [US] Wendy, Pollan: "Structure in Science and Art" [M], Beijing: Huaxia Publishing House, 2003
4. He Tianping: "Light of Scientific Experiment" [M], Beijing: Science Press, 2009
5. Luo Zhen: "Art from Nature" [D], Henan University, 2011
6. [English] Gombrich: "The Story of Art" [M], Guangxi Fine Arts Publishing House, 2008

课程评估 ASSESSMENT

19. 评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		20%		
课堂表现 Class Performance				
小测验 Quiz				
课程项目 Projects				
平时作业 Assignments		20%		
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		60%		
其它（可根据需要 改写以上评估方 式） Others (The above may be modified as necessary)				

20. 记分方式 GRADING SYSTEM

- A. 十三级等级制 Letter Grading
 B. 二级记分制（通过/不通过） Pass/Fail Grading

课程审批 REVIEW AND APPROVAL

21. 本课程设置已经过以下责任人/委员会审议通过
 This Course has been approved by the following person or committee of authority