

DS302 课程大纲

- 1、2023 春季学期 (2-6 页码)
- 2、2024 春季学期起 (7-12 页码)

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	产品实现 Product Realization
2.	授课院系 Originating Department	创新创意设计学院 School of Design
3.	课程编号 Course Code	DS302
4.	课程学分 Credit Value	3
5.	课程类别 Course Type	Major Core Course
6.	授课学期 Semester	春季 Spring
7.	授课语言 Teaching Language	英文 English
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)	Seungwoo JE Assistant Professor, School of Design seungwoo@sustech.edu.cn

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 Credit Hours	32		32		64
12.	先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 N/A				
13.	后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 N/A				
14.	其它要求修读本课程的学系 Cross-listing Dept.	无 N/A				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

本课程从设计的角度向学生介绍了从最初的商业规划阶段到最终的上市和营销的完整产品开发生命周期。该课程旨在帮助学生成为领先公司新产品开发团队的成员，向学生介绍相关的工作流程以及设计师在此过程中的角色和职责。学生将通过识别和解决各种产品开发问题获得实践经验。学生将获得基本的设计研究技能，并运用这些技能完成设计项目。

技能:基本的生产计划, 设计研究

This course introduces students to the complete product development life cycle from the initial business planning stage to the final launch and marketing from a design perspective. Preparing students to become members of new product development teams in leading companies, the course introduces students to related workflows and the roles and responsibilities of the designer in this process. Students will obtain hands-on experience by identifying and resolving

various product development issues. Students will acquire basic design research skills and employ them in carrying out a design project.

Skills: basic production planning, design research

本课程有安排实地考察和与外部公司合作的可能性。届时课程内容和活动安排将会调整。

This course will include field trips and collaborations with external companies depending on availability. Lecture and activity schedules are indicative and may be adjusted.

16. 预达学习成果 Learning Outcomes

At the end of this course, students will be able to:

1. Describe product development processes and their components.
2. Plan and carry out product design by acquiring practical design research skills.
3. Present high-quality design proposals in a corporate context, accommodating the needs of various stakeholders.

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.)

<u>Week</u>	<u>Content</u>
1	<p>Lecture (4 hours) Course Introduction, Project Assignment. New Product Development Process.</p> <p>Practice (4 hours) Tutorials: Writing Proposal version 0.2</p>
	<p>Lecture (4 hours) Product/Market Survey and Analysis</p> <p>Practice (4 hours) Tutorials: Product Survey</p>
2	<p>Lecture (4 hours) User Research Techniques & Strategy</p>

	<p>Practice (4 hours) Tutorials: User Needs Research</p>
	<p>Lecture (4 hours) Interim review preparation and tutorials on presentation.</p> <p>Practice (4 hours) Interim Review with invited guests, formative feedback.</p>
3	<p>Lecture (4 hours) Concept Design</p> <p>Practice (4 hours) Tutorials: Concept Generation, Selection</p>
	<p>Lecture (4 hours) Concept Refinement - Stakeholder</p> <p>Practice (4 hours) Tutorials: Concept Refinement</p>
4	<p>Lecture (4 hours) Tutorials: Final Product Proposal</p> <p>Practice (4 hours) Tutorials: Final Product Proposal</p>
	<p>Lecture (4 hours) Final review preparation, tutorials.</p> <p>Practice (4 hours) Final review with invited guests.</p>

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

Kahn, K. B., Castellion, G, and Griffin, A, eds, 2005, PDMA Handbook of New Product Development, 2nd Edition, John Wiley & Sons: Hoboken, NJ

McGrath, Michael E., 2000, Product Strategy for High Technology Companies: Accelerating Your Business to Web Speed, John Wiley & Sons: Chichester

Ulrich, Karl T. and Eppinger, Steven D., 2003, Product Design and Development, McGraw-Hill: New York

Baxter, M, 1995, Product Design, Chapman & Hall: London.

课程评估 ASSESSMENT

19. 评估形式 Type Assessment	评估时间 of Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		10%		
课堂表现 Class Performance				
小测验 Quiz				
课程项目 Projects				
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		90%		
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

<input checked="" type="checkbox"/> A. 十三级等级制 Letter Grading <input type="checkbox"/> 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

Professor Tom Kvan Dean, School of Design
--

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	产品实现 Product Realization
2.	授课院系 Originating Department	创新创意设计学院 School of Design
3.	课程编号 Course Code	DS302
4.	课程学分 Credit Value	3
5.	课程类别 Course Type	Major Core Course
6.	授课学期 Semester	春季 Spring
7.	授课语言 Teaching Language	英文 English
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	Wanlin ZHANG Assistant Professor, School of Design Zhangwl3@sustech.edu.cn

	instructors)					
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 Credit Hours	32		32		64
12.	先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 N/A				
13.	后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 N/A				
14.	其它要求修读本课程的学系 Cross-listing Dept.	无 N/A				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

本课程从设计的角度向学生介绍了从最初的商业规划阶段到最终的上市和营销的完整产品开发生命周期。该课程旨在帮助学生成为领先公司新产品开发团队的成员，向学生介绍相关的工作流程以及设计师在此过程中的角色和职责。学生将通过识别和解决各种产品开发问题获得实践经验。学生将获得基本的设计研究技能，并运用这些技能完成设计项目。

技能:基本的生产计划, 设计研究

This course introduces students to the complete product development life cycle from the initial business planning stage to the final launch and marketing from a design perspective. Preparing students to become members of new product development teams in leading companies, the course introduces students to related workflows and the roles and responsibilities of the designer in this process. Students will obtain hands-on experience by identifying and resolving various product development issues. Students will acquire basic design research skills and employ them in carrying out a design project.

Skills: basic production planning, design research

本课程有安排实地考察和与外部公司合作的可能性。届时课程内容和活动安排将会调整。

This course will include field trips and collaborations with external companies depending on availability. Lecture and activity schedules are indicative and may be adjusted.

16. 预达学习成果 Learning Outcomes

At the end of this course, students will be able to:

1. Describe product development processes and their components.
2. Plan and carry out product design by acquiring practical design research skills.
3. Present high-quality design proposals in a corporate context, accommodating the needs of various stakeholders.

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.)

<u>Week</u>	<u>Content</u>
1	Lecture (4 hours) Course Introduction, Project Assignment.
2	New Product Development Process. Practice (4 hours) Tutorials on Writing Proposal
3	Lecture (4 hours) Product/Market Survey and Analysis
4	

	<p>Practice (4 hours) Tutorials on Product Survey</p>
5	<p>Lecture (4 hours) User Research Techniques & Strategy</p>
6	<p>Practice (4 hours) Tutorials on User Needs Research</p>
7	<p>Lecture (4 hours) Interim review preparation and tutorials on presentation.</p>
8	<p>Practice (4 hours) Interim Review with invited guests, formative feedback.</p>
9	<p>Lecture (4 hours) Concept Design</p>
10	<p>Practice (4 hours) Tutorials on Concept Generation and Selection</p>
11	<p>Lecture (4 hours) Concept Refinement</p>
12	<p>Practice (4 hours) Tutorials on Concept Refinement</p>
13	<p>Lecture (4 hours) Tutorials on Final Product Proposal</p>
14	<p>Practice (4 hours) Tutorials on Final Product Proposal</p>
15	<p>Lecture (4 hours) Final review preparation, tutorials.</p>
16	<p>Practice (4 hours) Final review with invited guests.</p>

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

Kahn, K. B., Castellion, G, and Griffin, A, eds. (2005). PDMA Handbook of New Product Development, 2nd Edition, John Wiley & Sons: Hoboken, NJ

McGrath, Michael E. (2000). Product Strategy for High Technology Companies: Accelerating Your Business to Web Speed, John Wiley & Sons: Chichester

Ulrich, Karl T. and Eppinger, Steven D. (2003). Product Design and Development, McGraw-Hill: New York

Baxter, M. (1995). Product Design, Chapman & Hall: London.

课程评估 ASSESSMENT

19. 评估形式 Type Assessment	评估时间 of Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		10%		
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		20%		
期末报告 Final Presentation		50%		
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

Professor Tom Kvan
Dean, School of Design