

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 | 设计中的人因学:Human Factors in Design |
|-----|--|--|
| 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 | DS 367 |
| 4. | 课程学分 Credit Value | 3 |
| 5. | 课程类别 Course Type | 专业选修课 Major Elective Course |
| 6. | 授课学期 Semester | 春季 |
| 7. | 授课语言 Teaching Language | 英文English USTech Southern University of Science and Technology |
| 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) | 安鹏铖 Pengcheng An Assistant Professor, School of Design Anpc@sustech.edu.cn |
| 9. | 实验员/助教、所属学 系、联系方式 | |
| | Tutor/TA(s), Contact | |
| 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 | 48 | | | | 48 |
| 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

This course will introduce the concept and an overview of human factors in design and related applications in several areas of knowledge. The course offers human factors as an area of study that examines the relationship between humans and their use of designed objects and environments. Human factors are discussed in the context of product design, informational design, behavioral design, user-centered design, built environment design, safety design, inclusive design, human computer interaction design, design in industry, game design, healthcare design, affective and pleasurable design, robotic and wearable design, and sustainable design.

Students will engage with multimedia interactive learning materials and produce both research-based and designerly learning outcomes. Lectures will be complemented by videos, directed readings, case study analyses, and applied exercises.

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 the application of human factors in diverse design contexts.
- 2. Recognize potential issues/opportunities of human factors in design and develop potential ways to address them.
- 3. Evaluate human factors as an aspect of designed artifacts, interactions, systems or environments.



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.)

| Week | Content |
|------|---|
| 1 | Lecture (2 hours) – Topic 1 - Introduction to the course |
| 2 | Lecture (4 hours) – Topic 2 – Basics of human factors |
| 3 | Lecture (2 hours) – Topic 3 – human-centered design |
| 4 | Lecture (4 hours) – Topic 4 – human factors and usability |
| 5 | Lecture (2 hours) – Topic 5 – human factors and user experience |
| 6 | Lecture (4 hours) – Topic 6 – workshop: understanding and empathizing with people |
| 7 | Lecture (2 hours) – Topic 7 – value-sensitive design for inclusivity |
| 8 | Lecture (4 hours) – Topic 8 – interim presentation and feedback |
| 9 | Lecture (2 hours) – Topic 9 – human factors in product design |
| 10 | Lecture (4 hours) – Topic 10 – workshop and guest lecture on study methods |
| 11 | Lecture (2 hours) - Topic 11 – human factors in human-computer interaction |
| 12 | Lecture (4 hours) - Topic 12 – workshops on identifying issues/opportunities of human factors |
| 13 | Lecture (2 hours) Topic 13 – group and individual tutoring on research question design |
| 14 | Lecture (4 hours) - Topic 14 – study design and pilot experiment |
| 15 | Lecture (2 hours) - Topic 15 – group and individual tutoring on data analyses and report |
| 16 | Lecture (4 hours) - Topic 16 – final presentation and feedback |

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

Jennifer Preece, Helen Sharp, Yvonne Rogers. Interaction Design: Beyond Human-Computer Interaction. John Wiley & Sons, 2019

Bridge, R. Introduction to Human Factors and Ergonomics. 4th edition. CRC Press, 2017.



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 | | 10% | | |
| | 课堂表现 Class Performance | | | | |
| | 小测验 Quiz | | | | |
| | 课程项目 Projects | | | | |
| | 平时作业 Assignments | | 70% | | |
| | 期中考试 Mid-Term Test | | | | |
| | 期末考试 Final Exam | | 20% | | |
| | 期末报告 Final Presentation | | | | |
| | 其它(可根据 需要改写以上 评估方式) Others (The above may be modified as necessary) | Contraction of the second seco | SUST | lech | Southern University of Science and Technology |

20. 记分方式 GRADING SYSTEM

þ 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

