

## 课程详述

### COURSE SPECIFICATION

1.	<b>课程名称 Course Title</b>	沉浸式体验的声音设计 Sound Design for Immersive Experiences				
2.	<b>授课院系 Originating Department</b>	创新创意设计学院 School of Design				
3.	<b>课程编号 Course Code</b>	DS364				
4.	<b>课程学分 Credit Value</b>	3				
5.	<b>课程类别 Course Type</b>	专业选修课 Major Elective Course				
6.	<b>授课学期 Semester</b>	秋季 Fall				
7.	<b>授课语言 Teaching Language</b>	英文 English				
8.	<b>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 &amp; Contact (For team teaching, please list all instructors)</b>	徐秋石 设计学院助理教授 XU Qiushi Assistant Professor, School of Design xuqs3@mail.sustech.edu.cn				
9.	<b>实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact</b>	无 NA				
10.	<b>选课人数限额(可不填) Maximum Enrolment (Optional)</b>					
11.	<b>授课方式 Delivery Method</b>	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
	<b>学时数 Credit Hours</b>	32		32		64

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

### 教学大纲及教学日历 SYLLABUS

#### 15. 教学目标 Course Objectives

本课程主要聚焦于沉浸式环境的声音设计，为学生提供对不同沉浸式体验的声音设计的多元理解，囊括从实体的到数字的，比如游戏声音设计、电影声音设计、VR/AR 声音设计，以及实体环境声音设计等。本课程培养学生用声音进行叙事的技能，为各种类型的环境创造沉浸式体验的声音维度，并且，创造沉浸式的声音体验。学生将充分发挥创造力，运用相关技能和技术，完成一个沉浸式体验的声音设计项目。

技能：声音编辑；设计沉浸式环境；声音叙事

This course focuses on sound design for immersive environments, providing students with a diverse understanding of sound design for different immersive experiences ranging from physical to digital, such as game sound design, film sound design, VR/AR sound design, and physical environment sound design. The course develops students' skills in narrating with sound, creating the sonic dimension of immersive experiences for various types of environments, as well as creating immersive sound experiences. Students apply related skills and technologies to complete a creative sound design project for immersive experiences.

Skills: sound editing; designing immersive environments; narration through sound

#### 16. 预达学习成果 Learning Outcomes

在本课程结束时，学生将能够：

1. 展现使用不同标准分析声音叙事的能力，包括完整性、丰富性和可传达性
2. 应用和讨论不同的声音技能和声音技术，并对其进行分析
3. 展示一个高质量的富有创造力的声音设计项目

4. 展现出将声音设计的理论和技术知识转化为制造沉浸式环境的创造力

Upon completion of this course, students will be able to:

1. Analyze sound narration examples for various criteria, including completeness, richness and intelligibility
2. Apply and discuss diverse sound skills and sound technologies
3. Present a high-quality creative sound design project
4. Demonstrate creativity in translating theoretical and technical knowledge of sound design into creating immersive 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	<p><b>Lecture (2 hours)</b> Course introduction and overview; Project assignments</p> <p><b>Practice (2 hours)</b> Seminar: analysis on examples of narration through sound Activity: feel various immersive experiences</p>
2	<p><b>Lecture (2 hours)</b> Key theories in Sound Studies and Sound Design</p> <p><b>Practice (2 hours)</b> Proposal Development</p>
3	<p><b>Lecture (2 hours)</b> The understanding of music in sound design</p> <p><b>Practice (2 hours)</b> Tutorials: experiments with music to narrate and express mood</p>
4	<p><b>Lecture (2 hours)</b> The understanding of noise Noise in sound design</p> <p><b>Practice (2 hours)</b> Tutorials: experiments with noise in designing sound</p>
5	<p><b>Lecture (2 hours)</b> The understanding of silence Silence in sound design</p> <p><b>Practice (2 hours).</b> Tutorials: experiments with silence in designing sound</p>



6	<p><b>Lecture (2 hours)</b> Sound and environment, soundscapes, spacial audio design</p> <p><b>Practice (2 hours)</b> Tutorials: experiments with soundscapes design</p>
7	<p><b>Lecture (2 hours)</b> Sound of object, both visible and invisible object</p> <p><b>Practice (2 hours)</b> Continued design development. Tutorials on sound design.</p>
8	<p><b>Lecture (2 hours)</b> Interim review preparation. Tutorials on presentation.</p> <p><b>Practice (2 hours)</b> Interim Review with invited guests Follow up of review comments and discussion on each other's projects</p>
9	<p><b>Lecture (2 hours)</b> Sound design for film</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
10	<p><b>Lecture (2 hours)</b> Sound design for game</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
11	<p><b>Lecture (2 hours)</b> Sound design for theatre</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
12	<p><b>Lecture (2 hours)</b> Sound and psychology, psychoacoustic theory</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
13	<p><b>Lecture (2 hours)</b> Sound and gender</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
14	<p><b>Lecture (2 hours)</b> The understanding of sound and sound technology</p> <p><b>Practice (2 hours)</b> Tutorials: Continued design development</p>
15	<p><b>Lecture (2 hours)</b> Tutorials on final presentation</p> <p><b>Practice (2 hours)</b> Final review preparation</p>
16	<p><b>Lecture (2 hours)</b> Evaluation and Conclusion</p> <p><b>Practice (2 hours)</b> Final review with invited guests</p>

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

**Books:**

- Agnieszka Roginska. *Immersive Sound: The Art and Science of Binaural and Multi-Channel Audio*. Routledge Publisher, 2017.
- Bob McCarthy. *Sound Systems: Design and Optimization: Modern Techniques and Tools for Sound System Design and Alignment*. Focal Press, 2016.
- David Sonnenschein. *Sound Design: The Expressive Power of Music, Voice and Sound Effects in Cinema*. Michael Wiese Productions, 2001.
- Karen Collins. *Game Sound: An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design*. The MIT Press, 2008.
- Trevor Pinch and Karin Bijsterveld (eds). *The Oxford Handbook of Sound Studies*. Oxford University Press, 2012.

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		30%		
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		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



南方科技大学  
SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Professor Tom Kvan  
Dean, School of Design

A handwritten signature in black ink, appearing to read 'TKvan', written over a light grey rectangular background.

