

## 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.	<b>课程名称 Course Title</b>	理解声音：科学、技术与社会 Understanding Sound: Science, Technology, and Society
2.	<b>授课院系 Originating Department</b>	社会科学中心 Center for Social Sciences
3.	<b>课程编号 Course Code</b>	SS131
4.	<b>课程学分 Credit Value</b>	2
5.	<b>课程类别 Course Type</b>	通识选修课程 General Education (GE) Elective Courses
6.	<b>授课学期 Semester</b>	2021-2022 学年第二学期（春季） 2021-2022 Spring Semester
7.	<b>授课语言 Teaching Language</b>	中英双语 Chinese and 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 青年会士 XU Qiushi, Junior Fellow 南方科技大学人文社会科学荣誉学会 Society of Fellows in the Liberal Arts, SUSTech e-mail: <a href="mailto:qiushi.xu@hotmail.com">qiushi.xu@hotmail.com</a>
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. 授课方式 Delivery Method	讲授	习题/辅导/讨论	实验/实习	其它(请具体注明)	总学时
	Lectures	Tutorials	Lab/Practical	Other (Please specify)	Total
学时数 Credit Hours	32				32
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

本课程旨在让学生了解国际学界新兴并迅速发展壮大的跨学科前沿领域“声音研究（Sound Studies）”。声音研究在过去二十年间兴起，作为对学术界长期以来的视觉中心主义的认知和突破——如果我们关注社会和文化中的声音以及听觉经验，会得到什么？STS 的声音研究从听觉范式这一全新维度重新感知世界，重新思考社会、文化和我们生活于其中的物质世界。本课程通过声音、音乐、噪音和静默的基本理念、前沿研究和具体实践，培养学生对听觉感官的认知以及对声音维度的重视；并且通过与声音相关的重要社会文化议题，使学生从声音的视角重新理解科学、技术、艺术、文化和社会的交织与互构。

This course aims to enable students to understand the new and fast developing field of Sound Studies. This interdisciplinary field has emerged in the last twenty years in response to the recognition that all too often the academy has been dominated by just one sense – sight. What happens if we pay more attention to sound and auditory experiences in society and culture? Sound Studies in STS perceive the world from a new dimension of sound, and rethink society, culture and the material world that we live in. This course includes the interpretation of basic concepts of sound, music, noise and silence, the introduction of frontier researches and the practice of sound art. It cultivates students' awareness and cognition of auditory sense and sonic dimension. In addition, through the important social and cultural issues related to sound, students will re-examine the interweaving and co-construction between science, technology, art, culture and society from the perspective of sound.

#### 16. 预达学习成果 Learning Outcomes

本课程预期让学生掌握的思维、知识、技能和方法如下：

- 1、对声音研究这一国际学界新兴并飞速发展的跨学科领域有一般性的了解；
- 2、掌握声音研究的核心概念、思维方式和研究方法；
- 3、了解与声音相关的重要社会、文化和艺术议题，并形成批判性理解；
- 4、能够以多元感官维度认知世界，具备跨学科思维；
- 5、理解听声音的重要性，并能够运用多媒体手段创作个人的声音作品。

Upon successful completion, students will be able to:

1. To have a general understanding of Sound Studies, an emerging and rapidly developing interdisciplinary field in the international academic world;
2. To master the central concepts, the way of thinking, and research methods of Sound Studies;
3. To understand and then develop a critical understanding of important social, cultural and artistic issues related to sound;
4. To be able to perceive the world from multiple sensory dimensions and have the ability of interdisciplinary thinking;
5. To understand the importance of listening and be able to use multimedia technology to create sound works.

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.)**

本课程计划16周完成，每周2学时

**第一周 导论：何为声音研究？**

阐释声音研究的学科状况和领域发展  
对视觉中心主义的认知与反思  
本课程的整体课程设置、价值、意义和目标  
课程作业与期末论文的要求

**第二周 从STS走向声音研究**

STS的背景介绍、学科状况和领域发展综述  
STS转向声音研究  
技术元勘（Technology Studies）在声音研究的应用及其价值  
STS与声音研究的关系

**第三周 实践课：聆听声音**

本周课程学生们将戴上眼罩全身心地投入到聆听实践中，充分调动听觉技巧，认知自然声音、人体声音、场景声音、机械声音、数字声音、实验性声音等六个声音模块，通过纯粹的听觉体验建立对于声音的感知力。

**第四周 声音哲学与哲学中的声音**

西方哲学中的声音思想  
中国古典哲学中的声音思想  
声音现象学概述

**第五周 声音景观与声音博物馆**

阐释声音景观的概念及其发展  
对于声景概念的批判与反思  
以中国的声音博物馆为例展现声景的呈现与保护

**第六周 静默：作为一种声音的无声**

静默与无声的哲学阐释  
以电影声音设计中的留白为例，展现静默在电影艺术中的表达

**第七周 何为噪音？**

“噪音”与“不想要的声音”辨析  
噪音、资本与工业文明  
噪音、大自然的声景与荒野的消逝

**第八周 古典乐器研究：钢琴**

钢琴是什么？它的物质性特征是什么？  
了解古钢琴、古钢琴的转译，以及古钢琴的表演实践运动。  
从STS（科学与技术元勘）的视角重新审视作为一种传统乐器的钢琴，并探索钢琴作为一种实验乐器的可能性。

**第九周 现代乐器研究：电子音乐合成器**

从传统乐器过渡到电子乐器，认知电子乐器和电子音乐  
慕格（Moog）电子音乐合成器的技术社会史  
从STS（科学与技术元勘）的视角重新理解电子音乐合成器

**第十周 实验音乐：声音艺术与技术的现代性与后现代性**

声音艺术、现代性与后现代性  
中国本土的实验音乐发展与实践  
中古哲学思想在实验音乐中的运用

**第十一周 STS视角下的录音室与声音技术**

录音室的技术与艺术

前期拾音技术和后期声音制作技术  
未被认知的技术使用者和声音艺术家——声音工程师  
声音的还原、复制与再造  
默会知识与录音室语言

#### 第十二周 声音与游戏

游戏声音的设计理念与创作  
游戏声音的制作

#### 第十三周 声音、医学与身体

中医闻诊与西医听诊  
身体对声音的感知与音乐疗法

#### 第十四周 声音与科学

从科学仪器到音乐仪器  
聆听科学实验室  
听鸟——鸟类学田野录音实践  
聆听自然——生物学研究与科学田野录音

#### 第十五周 声音与性别

声音有性别吗？  
性别、种族等身份类别是如何影响个体的音乐体验的？音乐又是如何形塑个体的身份认同？  
声音和声音技术是如何与权力、娱乐、暴力和欲望相互关联的？

#### 第十六周 总结与讨论：用声音思考

个人声音作品展示  
课程总结与延伸

#### Week 1 Introduction: What is Sound Studies?

An introduction to the emergence and development of this interdisciplinary area of Sound Studies  
The awareness and criticism of this visual world  
Values and objectives of the course  
Requirements of the course

#### Week 2 From STS to Sound Studies

Background, history and development of STS  
The turn from STS to Sound Studies  
The application and value of Technology Studies in studying of sound  
The relationship between STS and Sound Studies

#### Week 3 Practical Session: Listening to Sound

At this week, students will put on blindfolds and devote themselves to listening practice. It aims to fully mobilize students' auditory skills to perceive six sound modules including natural sound, body sound, scene sound, mechanical sound, digital sound, and experimental sound. Through pure auditory experience, students' perception of sound could be built.

#### Week 4 Philosophy of Sound and Sound in Philosophy

Thoughts about sound in Western philosophy  
Thoughts about sound in classical Chinese philosophy  
Introduction on phenomenology of sound

#### Week 5 Soundscapes and Sound Museums

The idea of soundscape and its development  
The criticism of soundscape  
Taking sound museums of China as an example to demonstrate the representation and protection of soundscapes

#### Week 6 Knowing Silence As a Kind of Sound

The philosophical interpretation of silence  
Taking the concept of blank space (留白, Liu Bai) in film sound design as example to present the expression of silence in film art

**Week 7 What is Noise?**

The discrimination between noise and unwanted sound  
Noise, capital, and industrialization  
Noise, soundscapes of nature, and the vanishing of wildness

**Week 8 Classical Musical Instrument Studies – The Piano**

What is piano? What is the materiality of piano?  
Fortepiano, the translation of fortepiano, and the performance practice of fortepiano  
From the perspective of STS (Science and Technology Studies) to re-examine the piano as a traditional musical instrument and to explore the piano as an experimental instrument.

**Week 9 Electronic Musical Instrument Studies – The Synthesizer**

From traditional musical instrument to electronic musical instrument, understanding electronic musical instrument and electronic music  
The technological and social history of the Moog synthesizer  
From the perspective of STS (Science and Technology Studies) to rethink the synthesizer

**Week 10 Experimental Music: The Modernity and Post-Modernity of Sound Art and Sound Technology**

Sound art, modernity and post-modernity  
Sound sculpture and space  
The materiality of sound and medium  
The development and practice of Chinese experimental music  
The application of classical Chinese philosophy in experimental music

**Week 11 The Recording Studio and Sound Technology**

The art and technology of recording studio  
The technology of recording and the technology of sound production  
The unrecognized technology user and sound artist – sound engineer  
The reproduction and reconstruction of sound  
Tacit knowledge and studio language

**Week 12 Sound and Game**

Sound design of game and its creation process  
The production of game sound

**Week 13 Sound, Body and Medicine**

Wenzhen in traditional Chinese medicine and auscultation in Western medicine  
Body's perception of sound and music therapy

**Week 14 Sound and Science**

From scientific instruments to musical instruments  
Listening to laboratory practice  
Listening to birds – the field recording of ornithology  
Listening to nature – the research of biology and scientific field recording

**Week 15 Sound and Gender**

Does sound have gender?  
How do identity categories like gender and race form our experiences of music, and how does music shape our experiences of identity?  
How do sound and sound technology relate to the operations of power, pleasure, violence, and desire?

**Week 16 Conclusion and Discussion: Thinking with Sound**

Individual's sound project presentation  
Summary and extension

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

授课教师将根据每节课的主题提供有针对性的阅读和参考资料

The course instructor will provide supplementary readings before each session of the lectures

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%		无故缺席 5 次及以上为不通过 Students with unexcused absence of more than 5 times fail.
课堂表现 Class Performance		30%		考察学生是否认真听课及参与课堂讨论的积极性和表现 Participation in discussion and in-class exercises
小测验 Quiz				
课程项目 Projects				
平时作业 Assignments		30%		个人创作的声音作品及创作说明 Each student will use multimedia technology to create their own sound work.
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		30%		按授课教师要求在一定范围内自选题目撰写学期论文 Students are expected to write a paper focusing on a specific topic.
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

