

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	教育与现代科技 Education with Modern Science and Technology
2.	授课院系 Originating Department	高等教育研究中心 Center for Higher Education Research
3.	课程编号 Course Code	HEC018
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	2021 春季 2021 Spring
7.	授课语言 Teaching Language	中英双语 Bilingual (English & 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)	赵建华 教授, 高等教育研究中心 0755-88010397 Prof. ZHAO Jianhua Director, Center for Higher Education Research 0755-88010397
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	刘锟 高等教育研究中心 14715371365 LIU Kun, Center for Higher Education Research 14715371365
10.	选课人数限额(可不填) Maximum Enrolment (Optional)	40

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	22	4	6		32
12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 No				
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	无 No				
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 No				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

<ol style="list-style-type: none"> 1. 掌握教育和科技基础概念及其发展历史，深入了解技术在教育中的应用； 2. 了解科技进步为教育变革提供的条件和基础； 3. 了解并掌握教育对科技发展的影响和作用； 4. 认识教育媒介发展史，掌握媒介对教育的影响； 5. 了解以人工智能为核心的未来教育的特征与形态； 6. 提高信息时代所需的数字素养，提升互联网学习中有效获取及处理教育信息资源，进行自我学习，协作学习及自我调控。 <ol style="list-style-type: none"> 1. Master the fundamental concepts and history of education and technology, and have a deep understanding of the application of technology in education. 2. Master the composition and application of ICT-supported learning environment, and the underlying educational theory in the design. 3. Awareness of policies, international trends, theories, and issues relating to learning with ICT 4. Awareness of a variety of ICT tools, and ability to use them for learning 5. Ability to create ICT content; Ability to design, carry out, and evaluate instruction that makes use of ICT 6. Develop deep understanding of and master the digital literacy, data literacy required in the information age, and be able to effectively obtain and process educational information resources in Internet learning, conduct self-regulated learning, collaborative learning competence.
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16. 预达学习成果 Learning Outcomes

<ol style="list-style-type: none"> 1. 熟悉并掌握教育与现代科技的基本知识和基本技能； 2. 帮助学生初步形成教育与科技的认识论体系； 3. 掌握教育与科技相互影响的发展简史； 4. 掌握开展互联网学习应具备的自我调节与自主学习能力； 5. 提升信息社会所需要的数字素养。 <ol style="list-style-type: none"> 1. Understand and master the fundamental knowledge and skills of education and technology; 2. Students form an epistemological system and conceptual landscape of education and technology;

3. Grasp the brief history of the development of the interaction between education and technology;
4. Develop self-regulated and autonomous learning competence required for carrying out Internet learning.
5. Improve the digital literacy required by the information society.

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.)

- 单元一：教育与科技发展史
 单元二：科技发展与教育变革
 单元三：从教育媒介发展史看科技对教育的影响
 单元四：融于科技的教育环境：构成、特征与应用
 单元五：教育与科技考察之旅：优必选、腾讯、华为、大疆、科大讯飞等。
 单元六：教育设计：科技与教育结合的桥梁
 单元七：科技引领的教育变革：从教育大数据、VR/AR到人工智能
 单元八：数字素养与未来社会
 单元九：科技驱动的未来教育
 单元十：小组汇报

Unit I: The history of education and technology.

Unit II: The development of technology and educational transformation.

Unit III: Analysis the impact on technology to education from the development of educational media.

Unit IV: Educational environments infused with technology: Its structure, characteristics and application.

Unit V: Investigation trip for education and technology in Ubi-tech, Huawei, Dajiang, and Keda xunfei.

Unit VI: Educational design: The bridge cross Technology and Education

Unit VII: Technology-leading education transformation: From educational big-data, VR/AR, to AI.

Unit VIII: Digital literacy and future society

Unit IX: Technology-driven future education

Unit X: Group presentation

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

- Selwyn, N. (2011). Education and technology: Key Issues and Debates. Continuum International Publishing Group. NY: New York.
- Kovalchick, A. & Dawson, K. (2004). Education and technology: An encyclopedia. ABC-CLIO, Inc. California: Santa Barbara.
- Goldin, G. & Katz, L. F. (2008). The race between education and technology. The Belknap Press of Harvard University Press. England: London.
- Curtis J. Bonk, C. J. (2009). The World Is Open - How Web Technology Is Revolutionizing Education. Jossey-Bass. CA: San Francisco.

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		15%		

Class Performance				
小测验 Quiz				
课程项目 Projects		30%		
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		45%		
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



SUSTech

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