

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	光电子导论 Introduction to Optoelectronics
2.	授课院系 Originating Department	电子与电气工程 Electrical and Electronic Engineering
3.	课程编号 Course Code	EE106
4.	课程学分 Credit Value	2
5.	课程类别 Course Type	专业选修课 Major Elective Courses
6.	授课学期 Semester	春季 Spring
7.	授课语言 Teaching Language	中英双语 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)	罗丹 副教授 电子与电气工程系 第二科研楼 525 电话: +86-755-88018552 电邮: luo.d@sustc.edu.cn Dr. Dan Luo Associate Professor Department of Electrical and Electronic Engineering, Faculty Research Building 2, room 525 Tel: +86-755-88018552 Email: luo.d@sustc.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)	50

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	0	0		32
12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 None				
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	本课程为光电子专业选修课，其它非光电子专业学生如果了解光电子技术应用方面的知识，也可选修本课程。 This course should be taken by everyone contemplating doing Optoelectronic in the following years. It should however also be suitable for non-specialists, i.e. for all those students who wish to study the knowledge of optoelectronic technology.				
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 None				

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

本课程适合本科一年级，该课程主要介绍光电子领域主要发展方向、前沿课题、应用领域。期待学生在进一步了解光电子领域的基础上，学习和掌握有关的科学技术知识，了解科学技术的发展方向，使得学生对光电子学领域知识有着初步的了解。

This course is suitable year 1 undergraduate who is interesting with optoelectronics. In this course, several aspects of optoelectronics including frontiers technology, research directions, and application fields will be introduced. By learning the curriculum, students will systematically comprehensive and understand the optoelectronics domain knowledge.

16. 预达学习成果 Learning Outcomes

通过该课程的学习，学生将了解和掌握光电子学的许多方面：例如，光的基本性质、光纤通信技术、激光器、显示技术、LED、3D 成像技术以及全息技术等。学生将具备初步的光电器件理论知识和应用知识的能力，能够将理论与实际相结合，具备一定的分析能力。

Through this course, students will learn and master the many aspects of photonics: for example, the property of light, optical fiber communications, laser, display technology, LED, 3D display, and holography technology etc. Students will possess an ability to apply preliminary theoretical knowledge of optoelectronic devices and application, the ability to combine theory and practice, with some analytical skills.

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.)

Chapter 1 Nobel Prize and Optoelectronics

Chapter 2 Basic Property of Light

Chapter 3 Optical Fiber Communications

Chapter 4 Laser

Chapter 5 Displays Technology

Chapter 6 LED

Chapter 7 3D Display

Chapter 8 Holography

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

推荐教材 Textbook: 无 none

自编教材 Self-editorial textbook

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		50%		
课堂表现 Class Performance		0%		
小测验 Quiz		0%		
课程项目 Projects		50%		
平时作业 Assignments		0%		
期中考试 Mid-Term Test		0%		
期末考试 Final Exam		0%		
期末报告 Final 0% Presentation		0%		

其它（可根据需要
改写以上评估方
式）
Others (The
above may be
modified as
necessary)

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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

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