

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	生物医学科研方法, Biomedical Research Methods
2.	授课院系 Originating Department	医学院, School of Medicine
3.	课程编号 Course Code	MED401
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.	Instructor(s), Affiliation & Contact (For team teaching, please list all instructors)	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) 王玉琨, 教授, 南方科技大学医学院 Email:wangyk@sustech.edu.cn 任欢, 教授, 南方科技大学医学院 Email:renh@sustech.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)	

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	32	0	0	0	32

12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	BIO320 分子生物学 MA212 概率论与数理统计
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

生物医学科研方法是以医学科学研究这种科学认识活动的过程、形式和方式为研究对象的一门科学。通过学习本课程，使学生掌握医学科学研究的基本过程、医学科学研究的基本方法、医学论文写作等方面的基本知识，提高学生的综合素质，为今后的科学研究奠定必要的基础。

The Biomedical research method is a science based on the process, form and method of scientific understanding of medical scientific research. Through the study of this course, students will master the basic processes of medical science research, basic methods of medical science research, medical paper writing and other basic knowledge, improve the overall quality of students, and lay the necessary foundation for future scientific research.

16. 预达学习成果 Learning Outcomes

1. 掌握生物医学研究的基本设计类型，熟悉临床研究的测量和评价方法，了解医学研究的统计分析原理。

Master the basic design types of biomedical research, familiarize with the measurement and evaluation methods of clinical research, and understand the statistical analysis principles of medical research.

2. 通过掌握医学科研方法提高学生在实践过程中发现问题、分析问题、处理问题的能力，帮助学生在进入临床前建立循证实践的思维。

Improve the ability of students to find problems, analyze problems and deal with problems in the process of practice by mastering medical research methods, and help students to establish evidence-based practice before entering the clinic.

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.)

第一篇	生物医学科研方法概述
first part	Overview of biomedical research methods
第二篇	生物医学科研课题的立项 生物医学科学研究的程序 相关文献综述与系统预评价
The second part	Project of biomedical research projects Procedure for biomedical scientific research Related literature review and system pre-evaluation
第三篇	生物医学研究体系建立、对照设计及效果判断与分析（生物医学研究体系与分析） 队列研究与横断面研究 对照研究、个例报告及其分析 成本效果分析和比较效果研究
The third part	Biomedical research system establishment, control design and effect judgment and analysis (biomedical research system and analysis) Cohort study and cross-sectional study Control study, case report and analysis Cost effect analysis and comparative effect study
第四篇	生物医学实验方法、技术与应用注意事项 体外实验研究与动物实验研究 新药研究与临床试验研究
The fourth part	Biomedical experimental methods, techniques and application considerations In vitro experimental study, Animal experiment New drug research and clinical trial research
第五篇	临床医学实验的设计、方法与评价 病因与危险因素研究 诊断性试验评价和疗效评价 预后研究
The fifth part	Design, methods and evaluation of clinical medical experiments Etiology and risk factors Diagnostic test evaluation and efficacy evaluation Prognosis study
第六篇	循证医学与医学人文及伦理 循证医学 医学伦理学与医学人文关怀
The sixth part	Evidence-based medicine and medical humanities and ethics Evidence-based medicine Medical Ethics and Medical Humanities Care
第七篇	生物医学课题研究的总结与发表 数据收集、整理与分析 生物医学科研课题的申请及计划书的制定 生物医学科研论文撰写、投稿与发表

The seventh part Summary and publication of biomedical research

Data collection, collation and analysis

Application for biomedical research projects and development of proposals

Writing, submission and publication of biomedical research papers

Week	Hour	Teaching Contents	Instructor
1	2	生物医学科研方法概述 Overview of biomedical research methods	Ren Huan 任欢
2	2	生物医学科学研究的程序 Procedure for biomedical scientific research	Ren Huan 任欢
3	2	相关文献综述与系统预评价 Related literature review and system pre-evaluation	Ren Huan 任欢
4	2	队列研究与横断面研究 Cohort study and cross-sectional study	Kunyu Wang 王玉琨
5	2	对照研究、个例报告及其分析 Control study, case report and analysis	Kunyu Wang 王玉琨
6	2	成本效果分析和比较效果研究 Cost effect analysis and comparative effect study	Kunyu Wang 王玉琨
7	2	体外实验研究与动物实验研究 In vitro experimental study, Animal experiment	Ren Huan 任欢
8	2	新药研究与临床试验研究 New drug research and clinical trial research	Kunyu wang 王玉琨
9	2	病因与危险因素研究 Etiology and risk factors	Kunyu Wang 王玉琨
10	2	诊断性试验评价和疗效评价 Diagnostic test evaluation and efficacy evaluation	Kunyu Wang 王玉琨
11	2	预后研究 Prognosis study	Kunyu Wang 王玉琨
12	2	循证医学 Evidence-based medicine	Kunyu Wang 王玉琨
13	2	医学伦理学与医学人文关怀 Medical Ethics and Medical Humanities Care	Ren Huan 任欢
14	2	数据收集、整理与分析 Data collection, collation and analysis	Ren Huan 任欢
15	2	生物医学科研课题的申请及计划书的制定 Application for biomedical research projects and development of proposals	Ren Huan 任欢
16	2	生物医学科研论文撰写、投稿与发表 Writing, submission and publication of biomedical research papers	Ren Huan 任欢

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

教材 Text book:

陈世耀, 刘晓清. 医学科研方法[M]. 北京: 人民卫生出版社, 2015.

参考书 Reference books:

[1] 梁万年. 医学科研方法学[M]. 北京: 人民卫生出版社, 2002.

[2] 王建华. 医学科研方法. 北京: 高等教育出版社, 2010.

[3] 陈坤, 陈忠. 医学科研方法. 北京: 科学出版社, 2011.

[4] 王福彦. 医学科研方法. 北京: 人民军医出版社, 2013.

[5] 隋建峰. 医学科研方法概论. 北京: 科学出版社, 2011.

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		40		
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		50		
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



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

本课程已经医学院教学副主任张文勇教授审核通过。

