

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	抽样调查 Sample survey				
2.	授课院系 Originating Department	数学系 Department of Mathematics				
3.	课程编号 Course Code	MA314				
4.	课程学分 Credit Value	3				
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	中文 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)	潘俊豪 Pan Junhao				
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact					
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	48				48

12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	数理统计(或概率论与数理统计) Mathematical Statistics (or Probability and Statistics)
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	
14. 其它要求修读本课程的学系 Cross-listing Dept.	

教学大纲及教学日历 SYLLABUS

15. 教学目标 **Course Objectives**

通过本课程的学习，使学生掌握抽样调查的基本概念、基本原理和基本方法。教学内容包括简单随机抽样，分层抽样，整群抽样，系统抽样；各种抽样机制的参数估计方法，样本量计算以及如何解决抽样调查中遇到的实际问题。

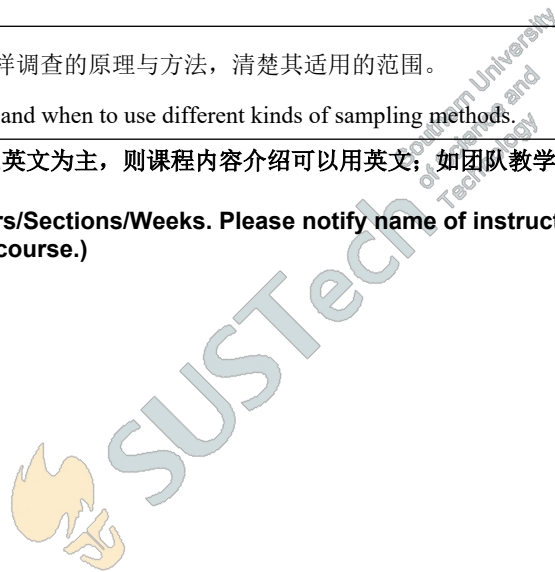
This course focuses on the sample design, data analysis and interpretation of survey data. The basic sampling methods covered include simple random sampling, stratified random sampling, clustering sampling, and systematic sampling. The underlying method of parameter estimation will be fully discussed for simple random sampling and stratified random sampling. Special estimation techniques including ratio estimations will be introduced in the context of simple random sampling. Analytic treatment of sample size determination, problem of nonresponse and nonsampling errors will be discussed.

16. 预达学习成果 **Learning Outcomes**

通过课堂学习，要求学生理解各种抽样调查的原理与方法，清楚其适用的范围。

Students are required to understand how and when to use different kinds of sampling methods.

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.)



1. 介绍抽样调查最基本的概念和步骤（4学时）。
2. 介绍简单随机抽样的实现及参数估计方法（8学时）。
3. 介绍分层随机抽样的实现及参数估计方法（12学时）。
4. 介绍整群随机抽样的实现及参数估计方法（8学时）。
5. 介绍系统随机抽样的实现及参数估计方法（8学时）。
6. 介绍如何解决抽样调查中遇到的实际问题（8学时）。

Introduction of the basic concepts and steps of survey sampling. (4 hours)

Introduction of the implementation and parameter estimates of simple random sampling.(8 hours)

Introduction of the implementation and parameter estimates of stratified sampling.(12 hours)

Introduction of the implementation and parameter estimates of cluster sampling.(8 hours)

Introduction of the implementation and parameter estimates of systematic sampling.(8 hours)

Problem of nonresponse and nonsampling errors will be discussed.(8 hours)

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

孙山泽, 抽样调查(第一版), 北京大学出版社, 2004.

Richard L. Scheaffer, William Mendenhall III, and R. Lyman Ott. Elementary survey sampling, 6th edition, Thomson Learning/Wadsworth Publishing Company, 2006.

Paul S. Levy and Stanley Lemeshow. Sampling of populations, methods and applications, 2nd edition. John Wiley and Sons, 1999.

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				
课程项目 Projects				
平时作业 Assignments		20		
期中考试 Mid-Term Test		30		
期末考试 Final Exam		40		
期末报告 Final Presentation				

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

--

