

理学院（数学与应用数学专业）课程简介

课程编号：1713001061

课程名称：统计学基础

学分/学时：4/64

先修课程：概率论

适用专业：统计学类专业

课程性质：限选

教材：孙荣恒编著.《应用数理统计》（第三版）. 科学出版社，2014.

主要参考书：（1）孙荣恒编著.《应用概率论》（第三版）. 科学出版社, 2016 年.

（2）陈希孺、倪国熙编著.《数理统计学教程》(第一版). 中国科学技术大学出版社，2011。

内容简介：《统计学基础（1）》是为数学系统计学和应用数学专业学生开设的一门专业基础课。内容包括：抽样分布，参数估计，假设检验，方差分析，线性回归模型。该课程是概率论的后续课程。本课程理论性和实践性都较强，表现为推导严谨、内容系统、面向实际。本课程既为统计学专业后续相关课程提供良好基础，也教会学生对实际问题进行数据处理和统计推断。

Course Description

School of Science Faculty

Course Code: 1713001061

Course Name: The Foundation of Statistics (1)

Credit/Hours: 4/64

Textbooks: Sun Rongheng. 《Applied Mathematical Statistics》. The Press of Science. 2014.

Reference Books: (1) Sun Rongheng. 《Applied Probability Theory》. The Press of Science. 2016.

(2)Chen Xiru, Ni Guoxi.《Course of Mathematical Statistics》. The Press of University of Science and Technology of China, 2011.

Course Description : MATHEMATICAL STATISTICS is a fundamental course for students whose specialties are statistics and applied mathematics. This course includes five chapters: sampling distributions, estimation, hypothesis testing, the analysis of variance and linear regression models. It follows the course of probability theory. It has the outstanding feature combining theory and practice. As a basis of sequential statistics courses, its reduction is strict. The content is systematical and practical. This course will be taught to students for two purposes: as a foundation of statistics, as a tool of data processing and inference.