**卫生统计学（20.141.0.1）**

《卫生统计学》是应用数理统计学的原理与方法研究居民健康状况以及卫生服务领域中数据的收集、整理和分析的一门科学。随着计算机技术、现代信息学、统计学软件的不断发展，卫生统计学的应用也越来越受到学术界重视。美国 FDA 和欧盟法规要求实验研究、临床研究、药物开发、医学杂志审稿、流行病学探索等需要统计学家参与，由统计学家指导研究设计、数据分析乃至呈递给 FDA 的报告。我

1. CFDA《化学药物和生物制品临床试验的生物统计学技术指导原则》要求新药和医疗器械的临床试验、杂志的审稿、高级别科研课题等，应由统计专业人员起草统计分析计划书，并写出统计分析报告。《卫生统计学》现已成为公共卫生学生的专业必修课。

《卫生统计学》作为一门应用学科，在教学中始终本着以实际应用为出发点的教学思路，为适应学科的发展、社会的需要，不断进行着教学手段、教学方法改进和研究，并采取现代网络化计算机教学设备，将统计学原理讲授、各类医学研究案例分析、SPSS 统计软件操作三者相结合的方式进行教学，培养医学生具有初步的科学思维、统计思维、逻辑思维和批判性思维等科学研究素质，并能够基本胜任从医学研究统计设计到收集资料、整理资料、数据库建立、数据管理、分析资料及得出科学的专业结论等工作，为学生学习其他医学专业课程，如中医临床内、外、妇、儿等课程、医学文献检索、科研思路与方法、流行病学、循证医学、中医药探索性实验、大学生探索性科创等课程，以及培养医学研究兴趣及毕业后的发展奠定基础。

《卫生统计学》是公共卫生事业管理专业学生的专业基础课，教学时数为 56 学时，所有教学内容全

部在计算机中心讲授和实践。《卫生统计学》的主要内容：1. 绪论；2. 计量资料的统计描述；3. 总体均数的估计和假设检验；4. 分类资料的统计描述；5. 二项分布和 Poisson 分布及其应用；6.χ2 检验；7. 秩转换非参数检验；8. 调查设计；9. 实验设计；10. 方差分析；11. 直线回归与相关分析；12. 医学人口和疾病统计；13. 寿命表及其应用；14. 统计表与统计图。

Basic requirements of the course (Course introduction)

"Health Statistics" is a science that applies the principles and methods of mathematical statistics to study the health status of residents and the collection, collation and analysis of data in the field of health services. With the development of computer technology, modern information science and statistical software, the application of health statistics has been paid more and more attention by the academic circles. US FDA (Food and Drug Administration) and EU regulations require experimental research, clinical research, drug development and medical journal reviewers, epidemiological exploration need participation of statisticians, guiding research

design, data analysis and presentation to the FDA report. " The principle of biostatistics technology in clinical trials of chemical drugs and biological products " made by China's CFDA requirements that the statistical professionals draft statistical analysis plan, and write the statistical analysis report for clinical trials of new drug and medical device and high level research projects, and participate to review of magazine. Health statistics has become a compulsory course for students of public health.

For "Health Statistics" as an applied subject, teaching ideas to practical application has always been the spirit point in the teaching. In order to adapt to the development of discipline and the need of society, improving teaching methods and taking the modern network teaching equipment should been made. Statistical theory and principle, application of SPSS statistical software case analysis have been combined in teaching to cultivate students' capability of scientific thinking, statistical thinking, logical thinking and critical thinking, basic competency of medical research designing, data collecting and sorting, database establishment, data management and data analysis. This course can lay foundation of learning other medical professional courses for students, such as clinical medicine, Internal medicine, surgery, obstetrics &gynecology, pediatrics, medical literature retrieval, college students' exploratory research courses, epidemiology and evidence-based medicine of traditional Chinese medicine, exploring experiment, and the cultivation of student’s interest in medical research and student’s development after graduation.

Health statistics is a basic course for students majoring in Public health management. The number of teaching hours is 56 hours. All the teaching contents are taught and implemented in the computer center. Main contents of "Health Statistics": 1. Introduction; 2. Statistical description of measurement data; 3.estimation of population mean and hypothesis testing; 4. statistical description of categorical data; 5. binomial distribution and Poisson distribution and its application; 6.χ2 test; 7. rank transformation nonparametric test; 8.survey design; 9.experimental design; 10.analysis of variance; 11. linear regression and correlation analysis; 12.medical population and disease statistics; 13.life table and its application. 12.statistical tables and charts.