理学院（数学与应用数学专业）课程简介

课程编号：1713001001，1713001002，1713001003

课程名称：数学分析

学分/学时：17/272

先修课程：

适用专业：数学类专业

课程性质：必修

教　　　材：《数学分析》华东师范大学编（第四版）.高等教育出版社, 2011 年.

主要参考书 ：

（1）《数学分析教程》，常庚哲、史济怀等编著，中国科学技术出版社，2016。

内容简介： 《数学分析》是高等学校统计学专业的本科一年级的一门专业基础课，要求学生须具有牢固的初等数学基础。本课程意在学生正确理解分析数学的基本概念，掌握微积分学的基础思想方法，掌握数学分析的论证方法，并具备较熟练的演算技能和初步的应用能力。亦为复变函数论、微分方程、概率论、实变函数与泛函分析等后继课程的理论先修课。本课程主要介绍极限理论、一元微积分学、多元微积分学和无穷级数理论的基本概念和方法，为数学系各专业一切后继课程提供必要的基础知识和基本技能的训练。

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Course Description

School of Science Faculty

Course Code：1713001001，1713001002，1713001003

Course Name： Mathematical　Analysis

Credit/Hours：15/272

Textbooks： 《Mathematical　Analysis》. Higher Education Press, 2011.

Reference Books：《Mathematical Analysis Tutorial》，Chang G.Z., Shi, J.H.，Science and technology of China press，2016。

Course Description：MATHENATIC ANALYSIS is a basic course for the first-year undergraduate, that are major in mathematics and applied mathematics or statistics in the university, which require students should have a solid foundation for elementary mathematics. This course is intended to let students on the proper understanding of the basic concepts of mathematics，master calculus of the basis of the way of thinking, grasp of mathematical methods of proof, and have more skilled calculus preliminary application of skills and capacity. Moreover, it is necessity of studying the subsequent courses, such as a single complex variable function theory, differential equations, probability theory, real variable function, and functional analysis. This course introduces the basic concepts and methods of limit theory, calculus of one variable, multi-Calculus and infinite series, to provide the necessary follow-up of all the basic knowledge and basic skills training.