课 程 大 纲

课程编号：02804030 **授课对象：研究生**
课程名称：多元变量分析与结构方程
英文名称：Multivariate Analysis and SEM
周学时/总学时：3/36 **学　　分：2**
任课教师：黄清漪 **开课学期：2013 春**
先修课程：Statistics, Linear Algebra, and Probability

任课教师联系方式：hqy@gsm.pku.edu.cn
辅导、答疑时间： To be determined

一、 项目培养目标

学习目标 1 系统掌握从事学术研究所需要的专业知识及理论。 具体目标 1、系统掌握本学科基础知识及基本理论 具体目标 2、掌握本学科前沿知识和理论、具有足够的相关领域的知识 具体目标 3、熟练掌握本学科的研究方法
学习目标 2 具有从事创新性研究的能力；能够撰写并发表高质量的毕业论文和学术论文 具体目标 1、撰写高质量的毕业论文和学术论文 具体目标 2、具有高水平的分析能力和批判思维能力，能够创造性地解决问题
学习目标 3 具有宽阔的国际视野，能够与国际学者进行交流、合作的能力。 具体目标 1、具有优秀的口头交流和文字交流能力 具体目标 2、能够熟练地运用至少一门外语进行学术交流与沟通
学习目标 4 了解学术伦理，具有强烈的社会责任感、关注社会问题 具体目标 1、了解社会责任感的重要性 具体目标 2、了解学术生涯中的学术道德问题 具体目标 3、关注现实社会问题

二、课程概述;

The objective of this course is to introduce and discuss various multivariate statistics techniques that are used for marketing data analysis. The target audience is Guanghua graduate students interested in quantitative research in marketing. The main focus of the course is to provide students with the necessary quantitative skills to (a) read and criticize published marketing research articles (b) conduct independent quantitative

research for papers and dissertations (c) progress to more advanced quantitative courses. The prerequisite for the course is a good course in statistics. Rudimentary knowledge of linear algebra is also required.

三、课程目标（包括学生所提高的技能要求），本课程目标如何服务于项目的培养目标

The objective of this course is to introduce and discuss various multivariate statistics techniques that are used for marketing data analysis. The target audience is Guanghua graduate students interested in quantitative research in marketing. The main focus of the course is to provide students with the necessary quantitative skills to (a) read and criticize published marketing research articles (b) conduct independent quantitative research for papers and dissertations (c) progress to more advanced quantitative courses. The prerequisite for the course is a good course in statistics. Rudimentary knowledge of linear algebra is also required.

四、内容提要及学时分配

Tentative Class Schedule:

Session 1: Introduction

Session 2: Review of Probability Theory and Statistics

Session 3-4: The Linear Model

Session 5-6: The Choice Model

Session 7: ANOVA and MANOVA

Session 8: Factor Analysis, Discriminant Analysis

Session 9-10: Structural Equation Models

五、教学方式

The course uses a combination of lectures, paper discussion, and analytical exercises to learn the material.

六、教学过程中 IT 工具等技术手段的应用

Students can use any software package such as R, SAS/IML, Gauss, Matlab, AMOS, LSREL etc.

七、教材

八、参考书目

九、教学辅助材料，如 CD、录影等

The notes, papers and exercises for each session will be handed out in class.

十、课程学习要求及课堂纪律规范

Students are required to read papers before class and participate in discussion in class. Each student is expected to contribute.As needed, cold calling will be used to enhance class discussion.

十一、学生成绩评定办法（需详细说明评估学生学习效果的方法）

Class participation – 30%
Homework – 30%
Final exam – 40%